Lectures
ON
CONTRACTIONS OF THE FINGERS AND TOES; THEIR VARIETIES, PATHOLOGY, AND TREATMENT.

Delivered in the Theatre of the Royal College of Surgeons,

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LECTURE II.—(*Concluded.*)

CONTRACTIONS OF THE FINGERS (CONTINUED).

8. *Contractions of paralytic and spastic origin.*—A complete account of the various conditions coming under this denomination would require an entire course of lectures, and it is hence necessary to confine our attention to those forms which belong to the surgeon rather than to the physician. All the nerves which govern the muscles acting upon the fingers, the ulnar, the musculo-spiral, and the median, are liable to injury—the median and ulnar more particularly by wounds, usually in the wrist, and the musculo-spiral by pressure of a crutch. An injury involving solution of continuity of the *ulnar nerve* is a very grave accident, unless it can be treated surgically without any long delay. The symptoms are such as might be inferred from a knowledge of the distribution of the branches. It will be remembered that the nerve supplies the flexor carpi ulnaris and ulnar half of the flexor profundus digitorum in the forearm, the whole of the muscles of the hand, except the abductor and outer head of the flexor brevis pollicis and the two outer lumbricales, and it gives sensation to the skin over the inner side of the wrist and hand, to the palmar and dorsal surfaces of the little and ulnar half of the ring finger, and sometimes also to the radial half of the ring finger and ulnar half of the middle finger. The effects of the nerve lesion will, of course, vary with the position of the injury. If the trunk be divided just above the wrist, the branches to the two forearm muscles and the cutaneous branch to the back of the hand and fingers will be spared; but the palmar cutaneous filament will probably be implicated by the wound. The paralysis of the interossei produces an inability to flex the first phalanges and extend the second and third, while the unbalanced action of the extensor, and superficial and deep flexors, causes the position of superextension of the metacarpo-phalangeal joint with flexion of the inter-phalangeal joints, which constitutes the *main en griffe* of French pathologists (see Fig. 7, THE LANCET, July 18th, page 110). The clawing is chiefly marked in the ring and little digits, especially the latter, but is minimised in the index and middle fingers by the continued integrity of the first and second lumbricales. There is, in addition, great loss of power in flexion and adduction of the thumb, and complete loss of sensation over the front and distal part of the back of the little finger and the corresponding portion of the ulnar side of the ring finger. At a later stage nutritive changes appear in the paralysed structures, and the deformity becomes complicated by the atrophy of the skin and subcutaneous fat, the hollowing of the interosseous spaces and the wasting of the thenar and hypothenar eminences. If the nerve be injured at the elbow, the paralysis of the two forearm muscles, and the loss of sensation over the ulnar side of the back of the hand, would add to the symptoms, but would not sensibly affect the deformity. The treatment is to seek for the divided ends of the nerve, and to unite them if possible. Should the interspace be too great to allow direct suture, an attempt might be made to restore continuity by cutting a long flap from the proximal extremity of the nerve and bringing it down to the distal end; or by the transplantation of a portion of nerve from an amputated limb, should the opportunity be afforded. Where the wound lies immediately above the wrist, it is well to remember that the ulnar nerve and vessels are covered by a fibrous band, which passes from the radial side of the flexor carpi ulnaris tendon in this situation to blend with the anterior annular ligament. It should also be recollected that the deep branch of the nerve, which is occasionally implicated in penetrating wounds over the hypothenar eminence, runs around the ulnar side of the unciform process of the unciform bone, and may there be exposed without much difficulty. After operation the hand should be placed in a position of adduction and flexion, and the wound dressed antiseptically. Should this measure fail, the apparatus devised by Duchenne may be applied to replace the action of the paralysed muscles.

Musculo-spiral paralysis may be induced by ordinary wounds or contusions, or by long-continued compression of the nerve against the humerus, either by the handle of a crutch, while the patient is sleeping with his head resting upon an arm which is supported by the back of a chair. The consequences are a paralysis of the extensors of the elbow, the supinator longus, the supinator brevis, and the whole of the extensors of the wrist, thumb, and fingers, as well as a loss of sensation over the cutaneous areas of the arm, forearm, and hand supplied by the nerve. For the patient the most striking symptoms are the flexion of the wrist and fingers, the loss of power to abduct the thumb, and especially the enfeeblement of grasp due to the inability to fix the wrist during the action of the finger flexors. If the wrist be held firmly by the other hand, or by another person, in the position of extension, the power of grip becomes restored. A similar condition is present in lead poisoning; but here the loss of power is confined to the extensor muscles, and the supinator longus remains unaffected. The possibility of a crutch paralysis should lead the surgeon to warn every patient who is compelled to use the implement, in order that the paralysis may be perceived and arrested in its earliest stages. When the condition has become established, an attempt should be made to restore function by massage and electricity, and if these fail, the nerve should be exposed at the seat of injury, and its continuity restored by the excision of the atrophied portion and union of the two free extremities.

In paralysis of the *median nerve* by a wound above the wrist, the most distressing symptoms are referable to the trophic lesions in the integuments of the thumb, index, middle and radial side of the ring finger on their palmar surface and the distal half of their dorsal aspect. There is, in addition, a partial loss of power of flexion and abduction of the thumb, with wasting of the thenar eminence and some interference with the delicacy of the movements of the index and middle fingers, owing to the paralysis of the first and second lumbricales. If the nerve be divided above the elbow, the pronators and all the flexors of the wrist, thumb, and fingers, except those supplied by the ulnar nerve (flexor carpi ulnaris, and ulnar half of the flexor digitorum profundus), are paralysed, and consequently the hand is, for all practical purposes, quite useless. The rules for treatment are similar in principle to those laid down for injuries of the musculo-spiral and ulnar nerves.

Spastic paralyses, in connexion with central disease, need not be discussed; but the surgeon is sometimes consulted for conditions of persistent spasm which apparently depend upon excessive use of certain muscles. Erichsen refers to, and figures, a case of flexion with pronation attributed to cutting with heavy shears. He notes that when the wrist was extended the fingers became flexed, and when the wrist was extended the fingers became bent in. It is not stated whether the permanency of the contraction was tested by the use of an anæsthetic, but the patient, as well as another in whom the extensors were affected in like manner, became cured by means of friction and galvanism, with the use of a straight splint. A case of spastic contraction of the right little finger of thirty-five years' duration is at present in the Mile-end Infirmary. The flexion of the finger is associated with slight adduction of the hand, but the parts can be straightened completely by passive force. The condition is attributed to a wound near the elbow. There is no lesion of sensation.

The group of affections known as *writer's cramp* usually fall within the province of the physician, and will only be briefly referred to. They are of uncertain pathology, vary considerably in their manifestations, and, although most common in persons much engaged in writing, are by no means confined to these. The symptoms may assume three different types—spastic, paralytic, and tremulous, affecting the muscles of the hands and forearm, and these

may be combined in various ways. The prognosis is unfavourable; but the treatment found most hopeful is to relieve the affected muscles from the strain to which they have been accustomed, and strengthen them by massage and galvanism. Interference by surgical operation has been unsuccessful, except in one case, in which Stromeyer divided the flexor longus pollicis tendon.

9. *Congenital and infantile contractions* are usually of paralytic origin, but include a proportion of cases of true hammer finger. The common form is that already described by Mr. William Adams (Medical Society, Dec., 1890), in which the inter-phalangeal joints of one or more fingers (most frequently the fifth) are flexed, and the integument on the palmar aspect forms a longitudinal fold, which becomes tense when an attempt is made to straighten the digit; the metacarpo-phalangeal joint is super-extended. At first the finger may be fully extended by passive force, but after a few years the position of flexion at the first inter-phalangeal joint is rendered permanent by imperfect development of the ligamentous fascial and even cutaneous structures in front of the articulation, while the terminal phalanx usually remains more or less helpless. The condition is probably dependent on paralysis of the interossei. The use of friction, passive movement, and electricity may be of value in the early stages.

10. *Trigger finger.*—The description of this curious affection has been left until the last because its true nature is still an unsolved problem, and it is hence difficult to place it in any of the groups already described. It is indeed rather a pathological curiosity than an important item in surgical disease, and many surgeons of long experience have never met with a single example. Of the mechanism of its causation we know almost nothing, of its ultimate tendencies we know little more, and its morbid anatomy is almost entirely speculative. Nevertheless, it has a literature extending over forty years, and comprising nearly a hundred separate contributions, the last of which, a model in its way, is a monograph of 250 closely printed large octavo pages, the work of Dr. Carlier. I do not propose to offer more than a brief summary of the experience and theories which go to form the modern view of the subject. My personal contact with the disease is limited to two cases, neither of which presented any special features capable of throwing a new light upon the points at issue.

Trigger finger, the *doigt à ressort* of French authors, may be defined as a peculiar defect in the motions of the digit, consisting, first, of an impediment which obstructs the movement of flexion or of extension, or of both, followed, if the motive force be continued, by a sudden cessation of the resistance, and a brusque, spring-like action that often bears a remarkable resemblance to that which accompanies the opening and closure of the blade of a penknife. The first observation was that of Notta in 1850. A finger attacked by this affection generally lies when at rest in a position of flexion, which by a voluntary effort or by passive force may be overcome in the peculiar manner described in the definition, the resistance suddenly yielding with a trigger- or spring-like action; and the same phenomenon is usually but not necessarily repeated when the digit is again bent. In exceptional cases a reverse condition obtains; the passive finger is kept in a state of extension, and it is during flexion that the trigger phenomenon is elicited. The movement may be merely inconvenient or it may be more or less painful. The sign may be constant, accompanying every movement, or it may be intermittent, disappearing and recurring without any obvious reason. It is usually confined to a single finger, but it may be multiple. The digits most frequently involved are the middle finger, the ring finger, and the thumb, while the index and little fingers are relatively free, and the right side is more often affected than the left. It is rather more common in women than in men (in the proportion of three to two); and much more frequent in adults than in children, but may appear at all ages. The etiology is ill understood. In many cases an important influence, direct or remote, has been assigned to rheumatism; in others the condition has been attributed to injuries of various kinds; in others to occupations necessitating overuse of the digital articulations (as in sempstresses); but no cause has yet been recognised which can account for any large proportion of the examples.

Pathology.—The explanations of the peculiar movement which characterises the disease are for the most part of a purely theoretical character, for, as might be anticipated, the opportunities for direct examination of the structures have been extremely rare. It speaks highly indeed for the ingenuity of our investigators that so many plausible hypotheses have been constructed upon so small a basis of observed fact. The views now open for consideration are as follow: 1. The development of a fringe or other growth in the synovial sheath of the flexor tendons. Such a tumour lying in the synovial cul-de-sac, which projects beyond the proximal end of the tendon sheath when the fingers are flexed, would be drawn within the theca during extension of the digit, and might in this way oppose a resistance to the movement which would be overcome as soon as the body had passed the constricted entrance of the theca. 2. A nodose condition of the tendon due to the development of a growth within the tendon or upon its synovial investment. Such a nodosity is said to have been unmistakably palpable in many cases; but in two examples examined by Carlier, where the tactile impression of a node was remarkably strong, the tendons were found perfectly healthy at the point of examination. On the other hand, Leisring of Hamburg actually exposed a nodosity in the profundus tendon at the level of the point at which it entered the canal of the flexor sublimis, excised it, and cured the disease. In another case a fringe-like tumour was discovered springing from the synovial covering of the flexor sublimis. The nodosity accepted as a fact, the "spring" phenomenon accompanying must be explained by the varying resistance of different parts of the theca, the impediment occurring at either of the firm, resistant portions of the canal which lie at the proximal opening of the sheath and opposite the shafts of the first and second phalanges, and the sudden release occurring at the weaker points, just above the metacarpo-phalangeal joint, and in front of the first inter-phalangeal articulation. In the case of the thumb, however, the fibrous sheath is much thinner than in the fingers, and the variations of strength in its different parts are comparatively slight after the inter-sesamoid portion of the canal is passed. An obstruction offered to a nodule in the flexor profundus by the channel in the flexor sublimis has been proposed as a cause; but although this might be accepted for the fingers, it would not apply to the thumb, which has but one tendon within its theca. 3. An alteration in the shape of the articular surface, such as was first pointed out by König in hammer toe. In these cases the movement of the distal bone is intercepted by the presence of a ridge extending transversely across the head of the proximal bone, and when by voluntary or passive force the ligaments are made to yield sufficiently to allow the obstacle to be surmounted, the movement is terminated by a sudden spring-like action of the extensors or flexors, as the case may be. This condition undoubtedly exists in certain cases of hammer toe and hammer finger; but it must be recollected that these two affections are developmental, and always begin during the period of active growth; while the great majority of examples of trigger finger appear in adult life, after the osseous and ligamentous elements of the articulation have assumed their permanent form. Corresponding changes of form, however, might occur in rheumatoid arthritis. 4. The development on the side of the head of the proximal bone of an osseous excrescence, so placed that the narrow (proximal) attachment of the lateral ligament must pass over it during the movements of flexion and extension. The possibility of this condition, suggested on theoretical grounds by Poirier, cannot be denied; it is, in fact, normal in the tibio-tarsal joint of the ostrich; but its existence in the human subject has yet to be demonstrated. It might well appear in connexion with rheumatoid arthritis, but indications of this disease are found in only a small proportion of cases of trigger finger. 5. Spastic irregularities of muscular action. According to this view, advanced by Carlier, the muscle at fault is nearly always the flexor sublimis. It must be recollected that the flexion of the first phalanx is effected mainly by the interossei and lumbricalis, that of the second principally by the flexor sublimis, and that of the third entirely by the flexor profundus; the extension of the first phalanx is due to the common extensor aided by the special accessory extensors in the case of the index and little fingers, the corresponding movement of the second and third phalanges is accomplished by the interossei and lumbricales. In the thumb the metacarpo-phalangeal joint is acted upon by the long and short flexors in the one direction, and by the extensores primi et secundi

internodii in the other; while the distal phalanx is flexed by the long flexor and extended principally by the abductor and flexor brevis, which send expansions to the long extensor tendon. If, then, we assume the existence of a reflex spasm of the flexor of a joint, the resistance must be overcome by vigorous action of the extensors or by passive force, and if under these circumstances the spasm yield suddenly, the spring phenomenon might be closely simulated. The theory is ingenious, but it involves certain difficulties in its application to trigger finger in general:—first, that the "spring" ought to be confined to the movement of extension, unless we assume—and this is, perhaps, too much to ask—that a similar spasm may affect the extensor also, and be overcome in an analogous way; secondly, that the spring movement should be greatly altered when the tendon of the sublimis is relaxed by flexion of the wrist and metacarpo-phalangeal joint, but such a modification has not yet been recorded; thirdly, that it should disappear during complete muscular relaxation under chloroform, and in some cases at least this has not happened.

For the present, we must confess our inability to decide the question. In the majority of cases the tendon nodule hypothesis would explain the phenomenon; and the articular theory might be tenable in adolescent cases or where there is rheumatoid arthritis; but more direct evidence is required, and closer observation should be directed to the effects of relaxation of groups of muscles by position, and of the muscular system generally by anæsthetics. The treatment must to some extent share in the uncertainty that attaches to the pathology. The safest and most hopeful measures appear to be a persevering use of passive movement combined with massage. Surgical operation has been successful in two or three cases, but it has missed its mark in others, and has probably left the patient in worse condition than before.

ABSTRACT OF A

Lecture

ON

OTORRHŒA; ITS CAUSES, CONSEQUENCES, AND TREATMENT.

Delivered to the Students of Charing-cross Hospital.

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I SUPPOSE that if one were to lecture here every afternoon of one's life, one could not possibly treat of a more important subject than this; important, not only to those engaged specially in surgery, but to any practitioner wherever situated; important, not only on account of its great commonness, but by reason of its extreme danger and its amenability to well-directed treatment when occurring in early life. By otorrhœa I mean a purulent discharge from the auditory meatus.

I wish you, first of all, to look upon discharge from the ear as a symptom of a pathological condition, and not of a disease *per se*. Naturally the causes of otorrhœa will arrange themselves into those which you discover in the auditory canal itself, and the causes which have their origin within the tympanic cavity. The principal causes situated in the auditory canal which induce a purulent discharge are as follows: First, it is important to know that the lodgment of a hard foreign body in a child's ear may produce a long-standing purulent discharge. Then there are such important causes of otorrhœa as impaction of hard cerumen, necrosis of the walls of the canal, growth of polypi, eczema, boils, or the opening of an abscess into the external auditory canal from other parts. A somewhat rare cause of the production of discharge from the external auditory canal is suppurating sebaceous cyst. When the cyst is of the dermoid variety and lies deep, the suppuration may be serious. The above forms a tolerably complete list of the more important pathological causes in the canal itself which produce a flow of pus through the external auditory meatus.

The importance of these causes is considerable; because, as a rule, they are all easily detected, and some of them easily treated. A foreign body may be removed, a polypus may be destroyed, a cyst curetted, or a necrosed bone scraped away; but the cases of otorrhœa which I am now going to speak about—those originating in the tympanic cavity itself—are relatively very frequent, and unfortunately are serious and dangerous in their results. The tympanum is lined with mucous membrane, continuous through the Eustachian tube with that of the throat, nares, and fauces. Moreover, the mucous membrane of the tympanum is somewhat peculiar, inasmuch as it is very closely adherent to the bones—in fact, it is looked upon by some as practically performing the functions of a periosteum. Thus bad inflammation of the lining membrane of the tympanum may implicate the bones, and caries and necrosis readily eventuate. The most frequent causes of inflammation of the tympanum ending in suppuration and perforation of the drum are catarrhal inflammations of severity about the throat and nares from severe colds, or in the swollen and ulcerated throats of scarlet fever, measles, and diphtheria. If you were to take 100 cases of bad persistent otorrhœa, something like 70 per cent. would have this history of their origin. The reason is not far to seek. In scarlet fever or measles the back of the throat and posterior nares are often enormously swollen and congested. This acute inflammation is propagated with rapidity to the lining membrane of the tympanum. There is rapid formation of septic pus, with ulceration and perforation of the membrana tympani.

It is important to consider the question of tuberculosis. A large number of these cases are found in delicately tubercular children; in fact, in those children who constantly have sore-throats, enlarged glands, inflamed tonsils, and "blockings" of the back of the nose, with lymphoid growths and mucus. In them suppuration within the tympanum and perforation of the membrane are exceedingly common. The suppuration, too, is generally very insidious in its onset, and not connected with acute pain and fever—symptoms which are markedly found in acute intra-tympanic suppuration. The child may be a little out of health for a few days and complain slightly of headache, and then we get a flow of pus, which is likely to persist as chronic otorrhœa. If such discharge be examined by an expert the tubercle bacillus may be found in large numbers. This is important, because it is possible that a good many cases of tubercular phthisis of the lungs may originate in this way, the original source of infection being the tympanum.

Referring to some of the varieties of injury to the tympanic membrane as a cause of otorrhœa, the lecturer said: One of the most important of these is the "prodding about" of an injudicious surgeon after a foreign body which he cannot see. Another cause is the accidental entrance of a thorn or pin into the ear, and you will sometimes get rents and tears of the drum arising from fracture of the base of the skull. You may get perforation and otorrhœa from the pouring into the ear by ignorant persons scalding or corrosive fluids, blistering fluid, and strong oils. Perforations from injury generally heal. The tympanic membrane will unite more certainly and persistently than any structure in the body, if it only has a chance. Ulcerations of the tympanic membrane, on the contrary, produced by intra-tympanic suppuration, are generally only capable of improvement.

One of the most common places for a small perforation to occur, in my experience, is at the interior inferior quadrant of the drum below and in front of the handle of the malleolus. Another very common situation is in the upper part of the membrana flaccida, or Shrapnell's membrane. When the perforation is very large, you almost always see the red inner wall of the tympanum through the opening. In some extreme cases where the whole of the drum is destroyed, as frequently happens after scarlet fever or measles, you will only see a fringe of the drum around a large irregular opening. The character of the discharge which runs from the meatus will often tell you immediately whether it has its origin within the tympanum or in the external auditory canal. If the discharge comes from the inside of the tympanum, it will have stringy mucus suspended in it, and when you have syringed the ear you will see stringy flakes of mucus in the water. If, on the contrary, it comes from the external auditory canal, it will consist of pus and epithelial débris. Having first carefully cleaned the ear and thrown a good light into it, you will generally without any difficulty see the perforation. The lesion may be of various sizes; some are very small

and some large. The small ones are difficult to diagnose. Under those circumstances the presence of a pulsating spot or bubble upon the membrane is sometimes noticed. Another diagnostic method is to cause the patient to fill his mouth with air, and force it through the Eustachian tube and perforation. The sound becomes audible to the surgeon, and sometimes even to the bystanders, varying from a loud whistle to a faint squeaking or bubbling.

Some of the dangerous consequences which threaten a patient suffering from this affection may now be considered. If you remember the principal anatomical relations of the tympanum, you will see that fruitful sources of danger are there. The cavity of the tympanum is separated from the brain by very thin bone, and the floor of the cavity is in very close relation to the carotid canal; in front of that is the jugular vein, and behind, in intimate relation, are the mastoid cells. On the inner wall we have the aqueduct of Fallopius, which forms the canal for the facial nerve. No disaster is more common in these cases than meningitis, and a considerable number of patients die from this malady. Again, some suffer from cerebral abscess, which is found usually in the temporo-sphenoidal lobe, more rarely in the cerebellum. The close approximation of the internal jugular vein and the lateral sinus explains the frequency of purulent thrombosis and general pyæmia. Then the facial nerve being implicated, you may have Bell's paralysis, disease of the tympanum being one of the most important causes of this well-known affection. With regard to the carotid artery, we note certain cases—fortunately very rare—where fatal bleeding occurs, the blood pouring from the meatus. The rough carious bone causes ulceration of the artery or of its tympanic twig. Patients with profuse otorrhœa are commonly in a condition of bad health. They are weakened by the discharge, and in some exaggerated cases the profuse loss of pus may even lead to lardaceous disease of the viscera. The symptoms of meningitis in connexion with tympanic suppuration are various. Usually they consist of more or less severe pain in the head, intolerance to light and sound, vomiting, inequalities of the pupils, optic neuritis, delusions of mind and thought, with inequalities of the pulse and respiration. Cheyne-Stokes respiration is very common. The temperature also presents very peculiar irregularities. As the disease progresses the patient begins to get drowsy and stupid, becomes completely comatose, and dies. When cerebral abscess occurs the symptoms are very vague and misleading. In cases showing "obscure head symptoms," you should always recall the possibility of some connexion between the cerebral mischief and chronic discharge of the ear.

The connexion of pyæmia with otorrhœa is a matter of the utmost importance, and the symptoms are extremely characteristic. You may lay down as a general aphorism that if a patient is smitten with severe pyæmia without obvious cause, and there be marked infarction of the lung, the focus of the pyæmic mischief is very likely to be in the middle ear. This is easy to explain, the septic matter being carried by the jugular vein to the right side of the heart, and thence directly to the pulmonary artery and its ramifications. In connexion with pyæmia, thrombosis of the lateral sinus is frequently found, and also induration in and tenderness down the side of the neck in the course of the internal jugular vein. Time will only allow me to mention to you the more important of the grave consequences which perpetually threaten patients who suffer from chronic otorrhœa; and, having alluded to them, we will now go on to say a few words about the principles of treatment which should guide you in this affection.

First of all, you will see that in this, as in many other maladies, prevention is better than cure. Consequently, in a case of scarlet fever or measles you cannot pay too much attention to keeping the back of the throat and nares clean and free of mucus, by sprays of sulphurous acid, chlorine, or any weak alkaline and antiseptic wash. Secondly, when intra-tympanic suppuration occurs, an opening ought to be made through the tympanic membrane to let the pus escape. It is often difficult to know when paracentesis ought to be done; but when we are called to a case of agonising, acute pain in the ear with deafness which is not relieved by leeches, mercury, and heat, and is becoming progressively worse, and you can see the tympanic membrane red, sodden, and bulging, then, I think, it is always wise to make an opening in the drum. This operation is generally easily done by giving an anæsthetic, and if you have not the needle I now show you, by passing a sharp-pointed cataract knife partly wrapped with lint through the membrane below and in front of the handle of the malleus. A gush of thick pus may take place. By keeping the ear persistently clean with warm water and mild antiseptics the membrane will probably heal, and the patient may escape the dangerous consequences I have mentioned. Should discharge already have occurred, you will best promote healing by carrying out a strict process of cleanliness. There is still much prevalent ignorance regarding the treatment of otorrhœa. I have known practitioners of eminence advise sea bathing in these cases, which is both harmful and dangerous. I have repeatedly heard it recommended that the ear should be left alone for the child "to grow out of it." It is much more likely that the poor children "grow into it," and a life-long condition of suffering and ill health ensues. A considerable number of cases of otorrhœa taken early may be cured by properly syringing out the ears two or three times a day with warm water and keeping the nasal passages cleaned out with alkaline lotions. Without strict cleanliness you cannot hope or expect the case to improve, and this must accompany any special applications.

Various ways of cleaning the ear are adopted and advised. None are so good for general purposes as to properly syringe it. In these cases the parents of a child should have it impressed upon them that unless this simple treatment is carried out two or three times a day, and the discharge thoroughly washed out, all other adjuncts to the cure will prove nugatory. You should also apply to the ear some sort of dilute antiseptic, such as dilute carbolic lotion (1 in 80), or the boracic lotion, or the dilute perchloride of mercury. All lotions should be poured into the ear warm, and in a very dilute form. They should be allowed to thoroughly soak the diseased parts. Fetor and abundance of discharge being checked, you may apply astringents; sulphates and acetates of zinc or lead are good, so is the sulpho-carbolate of zinc. These applications, again, must be warm and very dilute. In the otorrhœa of young people with this treatment a very large number of perforations will "dry up" and heal, the discharge ceasing. In cases of small round perforations, if the edges of the aperture are thickened and "callous," a saturated solution of nitrate of silver may be most carefully applied with a fine camel's-hair brush. I must say a word about the so-called "dry treatment" of packing the ear with powdered boracic acid, prepared chalk, and so on. This method is strongly recommended, but has been objected to, inasmuch as where the discharge is profuse the "caking" of the powder blocks the canal and prevents the pus escaping, giving rise to very disagreeable symptoms. In cases where the discharge is tending to "dry up," this method may be used with advantage. In these cases you may blow into the ear equal parts of prepared chalk and oxide of zinc with a small proportion of iodoform, in a very finely powdered condition. Of course it is perfectly obvious that, if there be any granulation tissue, and especially a polypus growing from the canal or tympanum, the discharge will be perpetuated until such conditions are removed. The methods of doing this I shall hope to describe in another lecture. Suffice it to say now that granulations may generally be subdued by the application of caustics. The best caustics I know of for this purpose are pure chromic acid potassa fusa, and strong "liquor plumbi." If you are tempted to apply caustics to granulations within the tympanic cavity, you must ensure that the parts are perfectly dry by repeatedly touching them with tiny pledgets of cotton-wool. Then try to make the granulations protrude a little way into the speculum; under good illumination, take the caustic and apply it to the granulations, not the wall of the canal. The pain caused by this application will largely depend upon whether the caustic has touched the granulation tissue only; occasionally it is very severe, but may be stopped at once by syringing the ear with warm water, which should be ready at hand. Another class of cases requiring special mention are those in which the otorrhœa is persistent, and the diseased processes implicate the mastoid cells. It is obvious that if disease, caries, and accumulation of inflammatory products implicate the mastoid cells, the parts are not directly accessible to remedies. In cases of otorrhœa with the granulation tissue and soft polypi in the canal, you must always make a careful examination of the mastoid process. If there should be tenderness or œdema, or redness, in such a case a free opening into the mastoid cells is essential in order to effect a cure.

[Having described the method of performing the operation,

and alluded to the difficulties, advantages, and disadvantages of such an operation, the lecturer proceeded to point out that before undertaking it there should be distinct evidence of its necessity. With regard to the loss of hearing in cases of otorrhœa, this is exceedingly variable. The absolute integrity of the tympanic membrane, or drum, of the ear is not essential to hearing, provided that the secondary membranes of the fenestra ovalis and rotunda are in contact, and if the stapes, which is the most important bone in the ossicular chain, be not displaced or destroyed. In cases of perforation a surprising amount of hearing may be brought about by what forms the last stage in the treatment of otorrhœa—namely, the application of some artificial contrivance to make up for the loss of the drum.]

With regard to the so-called "artificial drums," my practice is to advise patients never to wear them when the hearing of one ear remains unimpaired. Their action depends upon the knowledge that if we gently place down upon the stapes some membrane or soft substance, as wool, vibrations of sound are thus carried through the auditory meatus to the inner ear. All kinds of contrivances have been used to effect this purpose. Ear drums have been made of gold, silver, vulcanite, &c. Many of these are sold at as much as £2 a pair. They have been bought by the thousand, and have brought in large incomes to their inventors. The one in general use, and perhaps the best, is the old-fashiond pledget of wool, invented and employed by Yearsley many years ago. All other forms of "drum" are outcomes of this invention, and some of them deliberate "piracies" of a valuable principle. Cotton-wool pellets dipped into glycerine and very finely powdered boracic acid act both as an antiseptic application and a support to the remains of the drum. These cannot well be applied to very young children, but intelligent children of ten or eleven may be taught to apply them to their own ears by means of a light pair of forceps. In the event of the wool pellets "remaining behind," the patient ought to be warned that such an occurrence will do him no harm, and that a piece of wool may remain in the ear for an indefinite time without damage. All aural surgeons attach great importance in cases of otorrhœa to the condition of the nose. Ventilation of the ear is impaired by obstructions in the posterior nares, and the consequence is that the case does not do well. I advise in these cases that the ear should be occasionally inflated by the Valsalva method. This is best done when the ear is full of the warm antiseptic fluid. Lastly, the general health requires treatment. Tonics, iron, arsenic, and cod-liver oil are of exceeding value. If possible, frequent change of air should be ordered. Sea air is often injurious in these cases, and dry mountain air seems to give the best results. In treating otorrhœa it has to be ever remembered that cerebral complications are most to be feared. One of the most important things to avoid is the introduction into the ear of cold water. Sea-bathing is absolutely suicidal to those who have perforations of the tympanic membrane. Salt water, especially in the surf, where ladies and children "duck their heads," is generally not only strongly saline, but also full of grit and sand. To allow strong salt water laden with sand to rush roughly into a tympanum already diseased, is quite enough to induce fatal inflammation.

To conclude a rather short and imperfect description of an extensive subject, you will remember this point. When a patient has been the subject of otorrhœa and the discharge has ceased, the ear being dry, he is in the best possible condition you can wish for, and it is most unwise to employ the syringe. By doing so the discharge will be likely again excited, even although it may have been absent for years. I would also state it as my opinion that such operations as "curetting" out the tympanum in cases of old otorrhœa are dangerous. It is impossible to remove all the diseased tissues, and the cases often relapse. It must be remembered that, considering the enormous number of people who have perforations of the drum, comparatively few die of "brain mischief," and they will go through life, hampered it may be, yet safely and well, by the employment of the milder remedies I have touched upon. Such are some of the indications for treatment in cases of otorrhœa. I hope I have said enough to show the great importance of the subject. In my opinion there is nothing more important in general surgery and medicine than a full appreciation of the gravity of otorrhœa and a general knowledge of the principles, local, medicinal, and hygienic, which should guide our treatment.

ON CONGENITAL CONTRACTION OF THE FINGERS AND ITS ASSOCIATION WITH "HAMMER TOE"; ITS PATHOLOGY AND TREATMENT.

By WILLIAM ADAMS, F.R.C.S.,

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(Concluded from page 114.)

ASSOCIATION WITH HAMMER TOE.

FOR many years I have observed that congenital contraction of the fingers is frequently associated with hammer toe, occurring either in the same individual or in members of the same family. This occurs too frequently to be merely accidental; but what the relation of the association may be I am unable to say. It is, however, remarkable that these two affections have in the early stage their most prominent feature in common—viz., a defective power of extending the second and third phalanges, and this occurs equally in the little finger and the hammer toe, usually the second but sometimes the third toe. It would in this stage be correct to speak of them as a "dropped finger" and a "dropped toe." In one family I am now attending there are four cases of congenital finger contraction (two sons and two daughters) and two cases of hammer toe; one of these, with hammer toe in both feet, is associated with a slight degree of finger contraction in both hands. This occurs in one of the daughters aged seventeen; the other hammer toe case occurred in the father. It is not known that either of these affections occurred in the previous generation. In another family I attended many years ago three daughters suffered from congenital contraction of the fingers, and one from hammer toe. I have casts of two of these cases, and one is represented in Fig. 4. The elder brother suffered from a severe degree of hammer toe; he had been operated upon, without benefit, by division of the flexor tendons before he came under my care in January, 1878, but I completely cured the case by division of the lateral ligaments. He was an officer in the Foot Guards, and it seriously interfered with his military duties. I quoted this case in the paper on the Treatment of Hammer Toe I read before the Medical Society of London on March 19th, 1888.[1] Both these affections were known to be hereditary in the family. The assistant to the artist who has prepared the illustrations for this paper, a young man aged twenty-nine, happens to have two contracted little fingers, represented in Figs. 2 and 3; and observing this recently, I asked him about any case of hammer toe occurring in his family, when he told me that he had two hammer toes. His father also had two contracted little fingers, but he did not know whether he had hammer toe. Both little fingers are in the second stage, with the appearance of a lateral web on the outer side in the right finger, and on the inner side in the left finger, as shown in Figs. 2 and 3. He finds no inconvenience from the contraction; but, on the contrary, thinks the contracted little fingers rather more useful than straight ones, in holding large flat-headed tools used in wood engraving, and thought they might be called the "wood engraver's little fingers." This association of congenital contraction of the fingers with hammer toe I have seen in many other instances.

HEREDITY.

The hereditary character of the congenital contractions of the fingers appears to be well known, but so lightly regarded that medical attention is seldom directed to them; doubtless because in a considerable number of cases spontaneous arrest takes place, and the contraction does not advance to a degree which would cause inconvenience. Sometimes, however, young children are brought to us in consequence of other members of the family having given rise to some trouble. In the case of Miss Y——, aged three years (see Fig. 1), it was well known to have occurred in several members of the father's family. This child had congenital contraction of both little fingers, and was brought from India in the year 1854, as it was thought that some operation might be performed. The

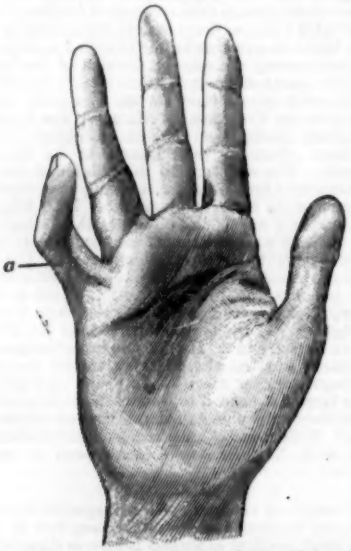
[1] Proceedings of the Medical Society of London, vol. xi. 1888, p. 252.

late Mr. Joseph Henry Green was consulted, together with Mr. William Freeman, of Spring Gardens. They suggested that I should see the case before any decision was arrived at. Upon examining the case at another consultation, I found there was no evidence of contraction either of the tendons or skin, and the little finger in each hand could easily be restored to the straight position, though the second and third phalanges immediately dropped again. My opinion was therefore against any operation, and in favour only of a retentive finger splint, which was worn day and night for a lengthened period, and at night only for several years. This child was one of a large family, consisting of eight girls and five boys; all the girls are said to have suffered from finger contraction in various degrees, and two of the boys had also contraction of the little fingers, but not in a severe degree. After losing sight of this patient for many years, I had the opportunity of seeing her and examining the hands again in June, 1890. She is about thirty-eight years of age. The little fingers are not quite straight, the second and third phalanges being a little bent, more especially the third phalanx; but this can be easily restored to a nearly straight position; the voluntary extension power is, however, feeble. It is satisfactory to find that the fingers have not passed into any confirmed contraction, and there is no appearance of a lateral cutaneous web. None of the other fingers have become involved. She is able to stretch an octave with the ring instead of the little finger, but she can use this in playing. There is one remarkable feature in this case which I have not seen in any other instance—viz., that both the little finger and thumb in each hand have been somewhat arrested in their development, and are now very perceptibly shorter than they ought to be, evidently showing some developmental defect.

TREATMENT.

The treatment of the congenital form of finger contraction must be described in reference to the three stages through

FIG. 6.



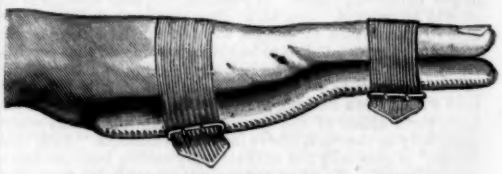
Congenital contraction of little finger in the second stage, with a contracted band of fascia, *a*, near to the median line.

which this affection may pass, though it only reaches the later stages in a certain proportion of cases.

In the *first stage*, in which the little finger only is affected, the treatment is essentially preventive, the object being to prevent the dropped finger falling into a stage of confirmed contraction with all its inconveniences. This can only be done by the child wearing a light retentive metal splint for a lengthened period, at first day and night, or for a considerable portion of the day, and at night probably for two or three years, or perhaps longer. The finger and hand should be well rubbed and exercised three times a day. The retentive splint may be like either that represented in Fig. 9; or in a more simple form a piece of whalebone or steel may be worn inside the finger of a glove.

In the *second stage*—viz, that of confirmed contraction, also generally confined to the little finger, but seldom reached under ten years of age,—the object of treatment is to overcome the contraction and restore the finger to the straight position. Here, then, the question may be asked whether this should be accomplished by long-continued mechanical extension alone? Or by the division of any bands of fascia that can be detected, followed by mechanical extension? For many years I followed the teaching of my predecessors, and opposed the idea of any good being done by operation, but in May, 1885, my friend Dr. Maughan brought a lady, Miss D——, aged twenty-three, to me, with both little fingers in the second stage of congenital contraction; and the right, represented in Fig. 6, was so unsightly, and its usefulness so much impaired, that she was anxious to have it straightened if possible. A band of fascia could be distinctly traced beneath the skin, and this I decided to divide before commencing the extension. The prominent contracted band is well shown in Fig. 6. A marked improvement followed the division of this band, as well as a number of short contracted bands passing upwards towards the skin. Mechanical extension was then carried on for two or three months, and the finger brought into a straight position. A retentive splint was afterwards worn at night for a long time, and a very satisfactory result was obtained, so that since then I have always adopted this plan in suitable cases. In many cases of congenital finger contraction in the second stage, beneath the prominent cutaneous web, which frequently runs along the margin of the little finger, one or more small but distinct bands of fascia may be felt, running longitudinally in the direction of the web. These should be divided by the point of the smallest fascia knife, cutting the band or bands transversely; but further relief to the contraction will be gained by cutting horizontally under the skin, and dividing numerous small but tense bands of fascia, evidently the terminal branches passing through the skin. Two or three punctures will probably be required opposite the first phalanx, and two or three opposite the second. Small compresses and plaster should be applied, and the finger bandaged to a flexible metal splint, well padded and applied so as to make some extension, as shown in Fig. 7,

FIG. 7.



Padded metal splint, as applied after the operation.

but the extension should at first be less than represented. On the third day an instrument for making extension should be put on, and the stretching process commenced and carried out as rapidly as it can be borne without producing pain or pressure sores. The principle in all fascia divisions is that of immediate extension, but in practice this cannot always be carried out. The instrument I prefer is the same as that used for Dupuytren's finger contraction, shown in Fig. 8, consisting of a dorsal plate, from which levers are carried along the fingers, and these are moved by rack-and-pinion joints corresponding to the phalangeal articulations. The patient may be taught to a great extent to manage this in a few days, so as either to release or increase the extension, as it can be borne without pain, but at first the surgeon should regulate this daily. This extension instrument must be worn day and night for a period varying from three to six months, as not only the skin but the deep ligamentous structures yield very slowly to extension, and would quickly relapse if the extension was discontinued too early; but it may be taken off daily for the purpose of washing, and a little exercise. When the extension is complete, the instrument may be gradually discontinued. A simple form of metal retentive splint applied on the palmar aspect, like that used for Dupuytren's con-

traction, as represented in Fig. 9, may be worn for a short time with slight intermissions, and then at night only. This must be continued for many months, till the fingers during the day's use show no disposition to bend, and the muscles as well as all the tissues involved have become accustomed to the straight position.

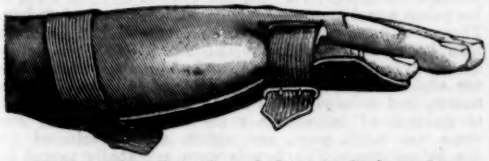
In the *third stage*—in which in addition to the little finger, the middle and ring fingers are always involved, and occasionally also the index finger is somewhat contracted, these fingers being drawn down in some cases at a late period of increase, say, from sixteen to eighteen or twenty years of age—the operative and mechanical treatment are

FIG. 8.

Extension instrument, with rack-and-pinion movements, to be used three days after the operation.

both essentially the same as that already described in the second stage. All the fingers involved should be operated upon at the same time, a careful division being made of the longitudinal bands running on either side of the median line of the first and second phalanges, and the terminal cutaneous fibres connected with them, which seem to give the appearance of an elongated, square, flattened band in the centre of each phalanx. The after mechanical treatment is precisely similar to that described in the second stage, but the extension instrument adapted to all the fingers should be worn night and day for a period of from three to six months, according to the severity of the case

FIG. 9.



Metal retentive splint, to be used when extension is complete.

and the age of the patient. Several cases have been successfully treated in the third stage.

In one of these cases occurring in a young lady aged twenty-three, in whom both hands were affected (and the left hand is represented in Fig. 10), this treatment was rigidly carried out for six months, the extension instrument being worn night and day, but removed for washing and exercises every day and the retentive metal splint is still used at night. The photograph showing the improvement after treatment, from which Fig. 11 is copied, was taken by my colleague, Mr. Macready (who has assisted me in many of these operations, and has carefully studied both the Dupuytren and the congenital finger contraction), about eight months after the operation in April, 1890, and up to

FIG. 10.

Congenital contraction of all the fingers in the third stage, in a lady aged twenty-three. Before operation.

the present time (May, 1891), the improvement has been fully maintained, and she has full use of the fingers in playing the piano &c. The right hand, somewhat less contracted than the left, is now undergoing similar treatment, which I have no doubt will be equally successful.

FIG. 11.

From the same case as Fig. 10, eight months after operation, showing the complete removal of all contraction.

In conclusion, my experience clearly proves that when taken in the first stage contraction may be prevented by mechanical means alone; and that either in the second

stage, when the contraction is confined to the little finger, and has become spontaneously arrested with deformity; or in the third stage, when contraction increases from sixteen to twenty years of age, and all the fingers become involved, a complete cure may be obtained by operation followed by a long course of mechanical treatment—i.e., wearing an extension apparatus day and night for a period of from three to six months after the operation, and a metal retentive splint, adapted to all the fingers, afterwards at night for some months. We may therefore consider that this congenital contraction of the fingers, like Dupuytren's contraction previously described, has now been brought fairly under the control of the surgeon.

Henrietta-street, W.

ON SOME COMPLICATED CASES OF ABDOMINAL SECTION.

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SURGEON TO THE SAMARITAN FREE HOSPITAL.

(*Concluded from page 121.*)

CASE 4.—On Dec. 27th, 1888, I removed two ovarian tumours from a woman thirty-nine years of age, a patient of Dr. Curgenven. She was of unhealthy strumous appearance, and had evidence of mitral contraction with very excitable heart action. The larger tumour, which weighed 20lb., had a twisted pedicle, and was very adherent to the abdominal wall and to the omentum. A considerable portion of the latter was tied off and removed. The pedicle, having been secured by silk in two pieces, the tumour was cut away. A small non-adherent tumour of the other ovary, about the size of a cocoa-nut, was also removed. In all the operations detailed above I had taken every care to prevent the access to the wounds of anything that was not absolutely clean, and also purified by carbolic solution. In this case, before closing the incision, I washed out the abdomen freely with warm water, and drained the pelvis with a glass tube. This tube was removed after seventy-two hours, there being then very little clear serum escaping from it. Flatus began to pass from the rectum on the morning of the day after the operation. At 9 A.M. on the second day the temperature had risen to 102·4° in the vagina; the pulse was 112. A menstrual flow came on, and the temperature fell a little. All day the flatus caused a good deal of pain, and there was some localised distension of the abdomen to the right of the incision. The distension and pain passed off in the night. Between midnight and 2 A.M. the temperature, which had ranged from 101·8° to 102° for twelve hours, rose suddenly to 103°. Ice was applied to the head, and kept on till the temperature had come gradually down to 98·4° on the seventh day. The wound did not heal well at its lower end, where the drainage-tube had been. The bowels were moved on the sixth day by enema. Subsequently there was occasional slight distension of the abdomen, which always passed off after an action of the bowels. The patient had not been able to pass urine except through a catheter since the operation. On the thirteenth day there was an attack of cystitis. The bladder was washed out with a weak solution of quinine, and the urine became clear and sweet after two days. At this time an unhealthy sore formed on the back, the skin of which had been tender from the fifth day. The temperature rose with these complications, and continued to rise after all evidence of bladder irritation had gone. On the twentieth day there was marked distension and much pain in the abdomen. Both passed off after the action of a clyster, but there remained a hard sausage-shaped mass above and to the left of the umbilicus, and evidently extending deeply into the abdomen. Next day the temperature rose to 102·8°, the pulse to 124. The mass in the abdomen enlarged downwards towards the cicatrix, and on the twenty-fourth day the wound opened in its upper part, which had been completely healed for more than a fortnight. A great deal of pus was squeezed out. From its position I presume that this abscess had originated in connexion with the divided omentum. The condition of the patient, which had never been satisfactory, now completely changed; the lower end of the incision healed at once; the bedsore assumed a healthy action, and the temperature fell to normal. The mass in the abdomen slowly disappeared, and on the thirty-fourth day the wound closed. The patient has had no trouble from the bowels or bladder since she went home. She suffered much from cardiac symptoms for some months, but is now quite well.

CASE 5.—In June, 1890, a woman, thirty-one years of age, and of evidently nervous temperament, was sent to the Samaritan Free Hospital by Dr. Cooper of Leytonstone. She was the mother of three children, and had been delivered of a stillborn child at the seventh month of gestation in 1887. Before then menstruation was normal, but she had since suffered much pain with each period. She was quite regular till April, 1890. On May 17th, being three weeks overdue, an apparently normal flow came on, and was very free for seven days. Then the patient, while engaged in scrubbing a floor, was suddenly seized with severe pain and became very faint. The pain continued, but not so severe as at first, and a hæmorrhagic discharge was more or less constant till I saw her a fortnight later. I found a rounded, elongated, fluctuating tumour, dull on percussion, rising out of the pelvis on the right side above the fold of the groin to the level of the anterior superior iliac spine. This was not very tender except when pushed downwards or backwards. A normal uterus was easily made out high up close to the pubes and slightly pushed over to the left side by the above mass. The whole pelvis behind was filled by an excessively tender, ill-defined swelling. Defecation was extremely painful, the bowels were very costive, and the complexion was dusky and unhealthy. An exploratory operation was performed on June 16th. I exposed and emptied a cyst growing from the right broad ligament; this being held aside, there was still a large swelling behind the uterus, almost obliterating Douglas's pouch. This proved to be a blood-clot enclosed in the left broad ligament. I ruptured its peritoneal covering and removed the clot. I was then able to bring together the two layers of the broad ligament and transfix them deep in the pelvis and close to the uterus by a double ligature. With this I tied off the greater part of the broad ligament in two pieces. The hæmorrhage had so stripped off the peritoneum from the wall of the pelvis that it was impossible to bring the outer end of the posterior layer of the broad ligament within the ligature. Some raw surface was consequently left, but there was no fresh bleeding. The pedicle on the right side was now secured, and the diseased parts, including both ovaries, were cut away. The peritoneal cavity in this case also was washed out with warm water, and a drainage-tube was inserted and fixed in the usual manner. The specimen from the left side showed much matting of the tissues, the fimbriated extremity of the tube being closed. There had been a rupture of the tube into the cavity which had contained the blood-clot. No fœtus was found. The specimen from the right side was an ordinary broad ligament cyst. The drainage-tube was removed on the second day. The highest temperature for the first eight days was 100·6° in the vagina on the evening of the day of operation. From the fifth morning the bowels were moved every second or third day by enema, many hard masses of fæces being removed. At the end of a week the patient complained of much pain and throbbing in the lower part of the back. Two days later a large tender mass was felt behind the uterus. There was also a very tender point close to the fundus of the uterus, between it and the anterior abdominal wall. The pain here was greatly aggravated by any upward pressure on the cervix. On the twelfth day the mass in the pelvis was larger, and elongated towards the left loin. There was some abdominal distension, and always much pain before flatus passed. The wound was completely healed over, but the temperature had gradually risen since the eighth day to 102·4°. I stopped all food by the mouth, and ordered rectal feeding, with twenty minims of tincture of belladonna every six hours. Next day there was much pain, and opium was substituted for the belladonna. The bowels were repeatedly moved by enema. The abdominal distension and the mass in the pelvis both diminished, but the tenderness on touching the uterus continued. The temperature gradually fell, till on the eighteenth day it was below 99° in the vagina, the pulse being then 64, and flatus passing without pain. Rectal feeding was now discontinued. On the twentieth day the wound reopened and several drachms of pus escaped, apparently from between the uterus and the abdominal wall. After this pressure on the uterus caused no pain. The discharge soon diminished and the temperature did not again rise above 99° in the vagina. The wound finally healed on the twenty-sixth day. The large mass behind the uterus

was now quite soft and free from tenderness. It gradually became imperceptible, being evidently bowel distended by fæces.

Of these patients, the three who got well were all delicate women, and in this respect were in marked contrast with the fatal cases. Yet they recovered in spite of the occurrence of deep-seated suppuration. A study of such cases seems to show that so long as the lumen of the bowel remains open and peristalsis is effective an inflammation in the neighbourhood of the peritoneum, or even within the peritoneal cavity, if there be no fistula, is not more dangerous than any other deep-seated inflammation of like extent. This view gives the best key to the explanation of most of the recent improvements in abdominal surgery. Of these the careful attention to the emptying of the bowels before operation, and to the feeding of the patient during convalescence, the less constant use of opium, the substitution of belladonna for this drug, and the more frequent use of purgatives and purgative enemata, are all methods directed to the condition of the intestinal tract. The advantages gained by washing out the peritoneal cavity seem to me also to depend mainly on the effectual way in which this process ensures a natural disposition of the intestines and a consequent immunity from obstructive troubles, even if adhesions should take place. The advantages of this method are usually attributed to its cleansing effect. I have, however, seen clots and pieces of tissue brought out of the abdomen after very free irrigation, so that it seems to me we cannot be sure that this method removes all foreign matter. It is, moreover, absolutely certain that if the conditions be otherwise favourable the leaving of a considerable quantity of blood and aseptic discharges in the peritoneal cavity does not necessarily exercise any injurious effect on convalescence. In a case of hæmorrhage from slipping of a ligature, whose abdomen I reopened last year, I left so much clot in the abdominal cavity that there was a discharge of thick syrupy blood from the drainage-tube for six days. Although the patient was extremely debilitated and weak, there were no ill effects that could be attributed to the presence of the blood, and she got quite well. Experimental evidence also proves that sterilised organic matter free in the peritoneal cavity is not necessarily harmful. The kidney of a rabbit, when inserted within the peritoneum of a living rabbit, may be absorbed apparently without difficulty.[1] Recently Messrs. Shattock and Ballance have shown that large pieces of cancerous tissue, if carefully preserved from septic contamination, may be completely absorbed without doing any harm when inserted into the peritoneal sac of an animal.[2] Such evidence shows that the complete removal of aseptic discharges and blood-clot, though of course desirable, is not an essential matter in abdominal surgery. Hence any superior cleansing effect obtained by washing cannot account for the advantages claimed for the method. Nor can the advantages of washing out be due altogether to the avoidance of irritation of the peritoneum. One has often seen cases recover with only the slightest constitutional disturbance after very vigorous sponging. There remains the important contrast between the two methods, that by sponging, the coils of gut are almost necessarily pulled about and displaced as the sponges are passed from one portion of the abdomen to another; whereas when the abdomen is filled with a liquid the floating intestines easily and naturally settle down in a normal position as the fluid is allowed to flow out.

It seems to me that not only is the benefit derived from washing the peritoneal cavity not due to a cleansing effect, but that as a cleansing process this method is distinctly dangerous in those cases in which only aseptic matter has to be removed. There is no convenient fluid which can be trusted to be free from all dangerous germs and can at the same time be safely used to irrigate the peritoneum. Plain water is recommended, and it is stated that the presence in it of living organisms does not exercise any injurious influence.[3] Of course there are many living organisms found in water whose presence in a wound is harmless, as the conditions are in every respect inimical to their growth and multiplication, while their absorption is a matter of no difficulty. Such organisms are present in all running waters. But we know that there are also other organisms of various kinds whose germs are almost universally present, and which develop and multiply wherever they come in contact with dead animal matter. There is no doubt that many such germs may be absorbed and eliminated by healthy human tissues. Hence methods which beneficially affect the condition of the alimentary canal and of the tissues generally are also indirectly efficacious in preventing septic disease. Nevertheless, under conditions favourable to their growth, septic or sepsin-producing germs show an extraordinary fertility. Their presence may render a hospital so unhealthy that any patient operated on in it, or any woman delivered in it, is exposed to the greatest risks. There can be no doubt that the most fatal poisons may exist in air and in water without our being able to recognise the fact by our unaided senses. If air or water which is thus contaminated should gain access to the peritoneum death from acute peritonitis will certainly follow. Other less fatal, but not altogether harmless, poisons may be introduced. In the last two cases which I have related circumscribed suppuration occurred, apparently commencing within the peritoneal cavity. This is a very rare complication. I have indeed seen no evidence that traumatic suppurative peritonitis ever occurs when antiseptic precautions have been carefully used. In each of these cases I had washed the abdomen with unprepared water, and I cannot but feel that if an aseptic or antiseptic fluid had been used the suppuration might have been avoided. The fatal case of hysterectomy above recorded is very instructive in this connexion. The operation was conducted with most careful antiseptic precautions, and though death was very rapid there was not a sign of peritonitis. Such facts yield strong evidence in favour of methods which are directed to preventing the access of germs to wounds at the same time that we use every endeavour to strengthen the tissues. We cannot tell beforehand when the absence of germs may turn the scale in favour of our patient. While believing, therefore, that the washing out process offers distinct advantages of a kind which are apparently not recognised by the chief advocates of this treatment, it seems to me that unless we can devise some antiseptic or aseptic fluid which may be safely used, we employ this method at an unnecessary risk. I cannot agree with my colleague, Mr. Meredith, when he says:—"The precaution of using previously boiled water is not essential to success, provided always that the fluid employed be free from actual septic contamination."[4] This last clause, in my opinion, begs the whole question. We ought to strive to devise some exact scientific means of excluding every source of danger. Failing the attainment of this, we should at least boil the water carefully if we use this process. To cease to seek for some more precise method because of the publication of successful cases treated without antiseptic precautions is to neglect altogether the teachings of science, and to reduce our practice to mere empiricism. Such a course could only be justified if the empiric methods showed a markedly lower death-rate from septicæmia than the scientific methods do. This is not the case. On the contrary, not only do deaths from septicæmia occur when these empiric methods are practised, but it is within my knowledge that in experienced hands, when no antiseptics are used, death from acute peritonitis may follow a simple ovariotomy within three days. The methods which expose a patient to this risk seem to me quite unjustifiable, for such deaths are certainly preventable.

Bryanston-street, W.

[1] Watson Cheyne: The Antiseptic Treatment of Wounds, p. 5, quoting Dr H. Tillmanns of Leipsic.

[2] Brit. Med. Jour., March 14th, 1891, p. 565.

[3] Lawson Tait: Brit. Med. Jour., May 15th, 1886, p. 923.

FOUR CASES OF OSTEOMALACIA OCCURRING IN INSANE PATIENTS.

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As a disease osteomalacia is still surrounded with much obscurity, so that any fresh facts bearing on its clinical or pathological associations are likely to be of interest. The following four cases came under my notice when resident in Wakefield Asylum, and occurred among a population of about 1300 female patients. Careful inquiry at the time

[4] THE LANCET, April 19th, 1890, p. 835.

failed to disclose a single case among the men. In three of the four cases mentioned a post-mortem examination was made, while the fourth patient is still alive. With the view of bringing under notice the salient points in each case, a few selections are appended from the clinical records of the asylum, the exhaustive notes of which have been rendered available by the kindness of Mr. Ernest Birt, deputy superintendent.

CASE 1.—R. I——, admitted Feb. 10th, 1880; age fifty-two; married, number of children not stated. There is a history of a previous mental attack during pregnancy, seventeen years before readmission. Her husband died twelve months ago, since which time she has been in poor circumstances. Brother of patient said to be "peculiar"; father cut his throat. She has delusions; fancies nine burglars are trying to break through her door &c. There is an aortic systolic murmur. Diagnosis, mania, with delusions of suspicion.—Aug. 7th, 1880: Most reserved, reticent, violent, and passionate if excited.—March 8th, 1885: There is much stiffness in joints of lower limbs, apparently from chronic rheumatism. This morning she accidentally fell. About the front of the left ninth rib there is a little deformity with apparent tenderness; no mobility or crepitus.—Nov. 1885: Self-engrossed; not excited lately.—Jan. 28th, 1887: Kyphotic spinal and consequent sternal deformity render examination of front of chest unsatisfactory.—Aug. 1887: Kyphosis increases. As a consequence the sternum is bent in a sigmoid form, making a trough, with the concavity looking upwards. The patient died on Nov. 1st, 1887.—Necropsy: Kyphosis and lateral curvature of the spine; sternum sigmoid; great sinking in of lumbar vertebræ and deformity of pelvis; limbs not affected. Ribs soft; old fractures from second to ninth, allowing ginglymoid motion. Skull-cap softened. Old vegetations on ventricular surface of one of the aortic valves of the heart. Liver cirrhotic. Kidneys contracted and atrophied. General atrophy of brain. Left posterior communicating artery very large; the posterior cerebral artery on that side seems to derive all its supply from the carotid, being joined to the basilar by an impervious cord.

CASE 2.—M. A. S——, widow, sixty-one, admitted Nov. 23rd, 1874. Previous treatment for mental attack at forty-four. Has three children. Relatives mentally affected, son and husband. Full of delusions—e.g., that she was in hell, and that the medical officer was the prince of devils. Noisy, restless, and when excited very sudden and violent.—April 30th, 1884: Left facial erysipelas (recurrent).—March, 1884: Erysipelas of left ear.—Aug. 17th, 1885: Fracture of neck of left femur. The patient stated that she was pushed downstairs by another inmate, who accidentally ran against her. Nothing peculiar (beyond ordinary anomaly) was noticed in the patient's mode of progression. She habitually moved in a curious manner, sliding one foot a little distance, then the other, and did so until put to bed. No sugar or albumen in urine.—Nov. 14th, 1887: Patient has been bedridden for several months, and shows rapidly advancing deformities of mollities. Still acutely melancholic.—Jan. 9th, 1888: Kyphosis marked.—Nov. 1888: Patient died.—Necropsy: Kyphosis and sigmoid sternum. Ribs soft and thin, two old fractures of right fifth, also of left hip. Skull softened. Heart: Valves atheromatous; small old vegetation on ventricular aspect of one of the corpora arantii of aortic valves. Lungs show calcareous and caseated nodules &c. Kidneys granular, cystic, and contracted. Brain: Large arachnoid cyst over left hemisphere; a large posterior communicating artery on left side, small on right. The right posterior cerebral rises directly from the carotid. Under the microscope a section of the rib showed typical osteomalacial changes.

CASE 3.—M. S——, aged seventy, unmarried. Admitted Oct. 26th, 1882. Previously in asylum from 1878 to 1880. One aunt mentally deranged. Has delusions and suicidal tendencies. Is very depressed and melancholic, but amiable, tractable, and industrious.—March 19th, 1883: Loud aortic bruit. In bed with diarrhœa.—July 9th, 1884: Yesterday pushed down by an excited epileptic, and sustained an intracapsular fracture of the femur. Shortening to extent of an inch &c.—Sept. 5th, 1884: Able to walk across room.—Nov. 26th, 1885: Occasionally complains of pain, worse at nights, in the lower part of the back, probably of rheumatic origin. Cataract in right eye.—Jan. 19th, 1887: Complains of frequent pain in right leg.—May 11th, 1886: Chronic bronchitis. Patient cries out when touched. Says she has "such pain in her limbs, and they keep clicking up, especially in the legs, and she cannot tell what it is."—May 19th, 1886: In bed from increased debility and bronchitis.—Aug. 30th, 1887: Is able to sit up most of the day. Kyphosis increases (first mention of this deformity).—May 21st, 1891: Note by Mr. Birt: "Patient still living, but is near the close. She has scirrhous cancer of the left breast. The aortic murmur and chronic bronchitis persist. Osteomalacia has not greatly increased. Shoulder-tips now reach the level of the ears, so much are the head and neck sunken, but kyphosis does not seem to be much increased. Within the last week or two she has become acutely melancholic, and exclaims, 'Oh! I am in misery; oh! I can't bide this misery.'"

CASE 4.—M. B——, widow aged fifty. Admitted April 26th, 1872. Two daughters, both living. Has been epileptic for more than twenty years; mother had "fits." Has delusions—e.g., thinks she is bewitched. Bruit with first sound of heart at apex.—Nov. 12th, 1880: noisy, excitable, and abusive; is in very robust health.—1885: Fits are rare, less than one a month, but very severe when they do occur.—May 18th, 1887: Patient says she fell against the closet last night, and complains that she hurt her left shoulder and right thigh; no fracture can be found.—Dec 16th, 1887: Patient gets about as usual.—Feb. 27th, 1888: Corpulent and feeble.—June 22nd, 1888: Patient is emaciating and osteomalacia is present; there is kyphosis; movements are stiff, feeble, and defective; complains of "pain in her bones."—Nov. 11th, 1888.—Patient has been sinking since last report; has advanced phthisis.—Necropsy: Kyphosis, with softening of the bones of the spine and of some of the ribs. The skull-cap is heavy and thick, its diploe filled with bony deposit, and there is the appearance of new bone on the inner vault. Brain: Vessels atheromatous; right middle cerebral smaller than the left; right posterior communicating compensates. Heart shows no valvular lesion beyond thickening of a corpus arantii on aortic valve.

A summary of these cases shows:—

No.	Name.	Age.	Delusions.	Readmission.	Children.	Fractures.	Heart lesion.
1	R. I.	59	Yes	Yes	Several	Ribs	Aortic
2	M. A. S.	75	,,	,,	3	Hip	,,
3	M. S.	78	,,	,,	0	,,	,,
4	M. B.	66	,,	,,	2	None	,,

Mr. Durham, in an analysis of 145 collected cases (quoted in Heath's Dictionary of Surgery), finds that 132 were females, and of these 91 were "first affected during pregnancy, or very shortly after childbirth." In the four cases above narrated we find that one woman had borne "several" children, but unfortunately there is no precise history of the exact number. Of the others, however, one had three children, another two, while the third was childless. As regards the period of onset, Mr. Durham concludes that "the great majority began to suffer between twenty-five and thirty-five years of age." In the above four cases, taking the age at which the disease was first noted, we get an average of sixty-eight. In three of them chronic rheumatism was suspected, in three fractures took place from trifling causes, and although not absolutely proved, fracture was most likely present in the remaining case. The association of osteomalacia with delusional and hereditary insanity, together with aortic valvular disease in all four cases, is worthy of note. As to the duration of the affection, one patient died eighteen months after the discovery of its existence, another survived two, the third three years, while the fourth is still alive at the end of seven years. The case of M. B—— shows epilepsy of many years' duration, winding up with a rapid final development of osteomalacia and of phthisis. The life-history of M. S——, the patient who is still living, presents a picture that both from the nature and the time of incidence, so far as is known of its various diseases, may be regarded as extraordinary. Springing from a mentally affected stock, she first came under treatment for delusional insanity at the age of sixty-six, and was readmitted at seventy for a similar complaint; an aortic murmur was noted at seventy-one, and fractured hip occurred a year later; well-marked osteomalacia at seventy-five; and, lastly, a scirrhus of the mamma at seventy-nine. There seems to have been a

general atrophy of structures, in which the nervous system suffered first, possibly because of the hereditary weakness in that direction. A remarkable feature of the case is the vitality which has enabled this patient to linger on in spite of so many formidable complications. The exceptional points shown in the above cases are the advanced age, the absence of frequent child-bearing, and the coincidence of aortic disease with recurrent attacks of delusional insanity.

Birmingham.

THE RADICAL CURE OF HYDROCELE BY EXCISION OF THE SAC.

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IN THE LANCET of Sept. 10th, 1887, and Oct. 26th, 1889, I have recorded seven cases of hydrocele treated by excision of the sac, and also directed attention to the favourable results which follow this method of radical cure. The three cases mentioned below, which have recently been under my care, are good illustrations of some of the conditions in which this treatment is especially valuable. In Case 1 the hydrocele was of the variety known as "multilocular," being composed of a number of separate cysts, and therefore not likely to have been cured by injection. Cases 2 and 3 would also have been unsuitable for treatment by injection, for in each the sac-wall was so thick and rigid that it was incapable of collapsing after the evacuation of its contents by tapping, consequently a large thick-walled sac remained, which was best excised, for if treated by the alternative method of radical cure—viz., by "incision"—its obliteration by a process of granulation would have been a tedious and uncertain mode of healing. In all three cases excision of the sac, which for reasons given in the papers above referred to I believe to be far preferable to "incision," was followed by the most satisfactory results.

CASE 1. *Multilocular hydrocele; excision of sac; recovery.*—F. E——, aged forty-three, sent by Dr. Blayney of Middleton, was admitted on Feb. 18th, 1891, suffering from a hydrocele of the tunica vaginalis, which had been present for several years, and had been tapped twice; on the first occasion about eight ounces of clear fluid had been evacuated, but on the second only a few drops came away, and there was no diminution in the size of the swelling. As he was anxious to have a radical cure performed, and did not wish to run the risk of an unsuccessful injection, it was resolved to excise the sac. The operation was performed on Feb. 20th. On laying open the sac of the hydrocele the cavity of the tunica vaginalis was found to be divided by delicate septa into a number of compartments, some quite distinct, others communicating with one another. The tunica vaginalis having been separated from its connexions with the scrotal tissues, the whole of the parietal layer was removed by dividing it close to its reflection on the testicle and cord. All bleeding having been carefully arrested, the wound was closed, no drainage being employed. Repair took place without any suppuration; the patient was up on the twelfth, and left the hospital on the nineteenth day after the operation, the wound being firmly healed.

CASE 2. *Hæmatocele after tapping a hydrocele; previous unsuccessful injection with iodine; excision of sac; recovery.*—W. S——, aged twenty-three, was admitted on April 27th, 1891, with a history of a hydrocele of the tunica vaginalis, which had been present for about ten years. It had been previously tapped twice, and once injected with iodine. The last tapping had been performed three days previously to admission, when six ounces of clear straw-coloured fluid were drawn off; in the course of twenty-four hours the swelling reappeared, and the integuments covering it became dark and discoloured. As it was evident that the case was one of hæmatocele following the operation of tapping a hydrocele, it was resolved to lay open the sac, evacuate the blood, and at the same time perform a radical cure by excising the tunica vaginalis. The operation was performed on May 2nd. A free incision was made into the cavity of the tunica vaginalis, which was found full of sanious fluid and portions of blood-clot, and the sac wall, which was extremely thick and of dense fibrous consistence, was dissected out and removed up to its reflection on the testicle. The wound was then closed, a drainage-tube being brought out at its upper and lower margins. Healing quickly took place, and the patient left the hospital on the twenty-first day after the operation.

CASE 3. *Suppuration in tunica vaginalis after tapping a hydrocele; excision of sac; recovery.*—E. S——, aged sixty-two years, was sent on Feb. 16th, 1891, by Dr. Fletcher of Bury, suffering from a large hydrocele of twenty years' duration, for which no treatment had previously been adopted. On tapping the tumour, which was quite opaque, about a pint of thick brownish fluid was drawn off. After the evacuation of the fluid the sac wall could be felt through the scrotal tissues to be extremely thick and of such rigid consistence that it was incapable of collapsing. On March 27th the hydrocele was tapped again, about the same quantity of fluid of a similar nature being removed. It gradually refilled and subsequently became extremely painful and tender. On April 25th he was admitted into the infirmary. The integuments of the front of the scrotum were in a gangrenous condition, and the adjacent parts were much inflamed. The same day a free incision was made into the cavity of the tunica vaginalis, which was full of pus; the tunica itself, which was thickened and calcified, was dissected out, and as the testis, though healthy, was greatly atrophied, it was also removed; a considerable portion of the gangrenous scrotal integument was also taken away. (The patient was the subject of an irreducible inguinal omental hernia on the same side. As the sac of the hernia was intimately adherent to that of the hydrocele, a radical cure was also performed on the hernia at the same time. A ligature was placed round the neck of the hernial sac as high up as possible, and the sac and omentum were then removed on the distal side of the ligature.) The margins of the upper part of the wound were then brought together by a few sutures, the lower part being left open on account of the inflamed condition of the scrotal tissues. Healing was somewhat slow, as there was some sloughing of the margins of the lower portion of the wound; it was, however, sufficiently advanced to allow the patient to leave the hospital exactly a month after the operation, a small granulating surface still being present.

Manchester.

THE MORTALITY OF TEN THOUSAND GENERAL SURGICAL OPERATIONS IN THE KASHMIR MISSION HOSPITAL.

BY ARTHUR NEVE, F.R.C.S. EDIN., and ERNEST F. NEVE, M.D., F.R.C.S. EDIN.

FOR many years past an analysis of all operations performed in the Kashmir Mission Hospital has been annually published. During the last few months we have published in the *Indian Medical Record* a retrospect, including the years 1882 to 1889. It was in 1882 that the senior of us arrived and took over charge from Dr. Edmund Downes, whose reputation as a skilful surgeon still lives in North India and Kashmir. The other writer arrived in 1886, so that the eight years coincide with the experience of both surgeons. The statistics thus collated show the following results, which are not without interest to the general surgeon. It should be borne in mind that the population of Kashmir consists of well-to-do peasants and somewhat less thriving townspeople. The climate is a temperate one, with cold snowy winters and warm summers. The chief diseases are syphilis, which ravages the towns, and small-pox. The Mission Hospital has now been partially rebuilt, but during the period under review the accommodation was of the poorest description. During the summer from fifty to seventy beds are occupied by surgical cases, and the climate permits of the patients living in the verandahs, and of all doors and windows being open. In the winter the number of patients is smaller. It has been found advisable, upon the whole, to take patients straight from the out-patient room to the operating

table; cleansing the part to be operated upon with soap-and-water, shaving, and antiseptics. The tables are self-explanatory.

—	Total.	Deaths.	Number of cases and cause.	Remarks.
A. Eye operations	3,651	0	..	..
B. Bone operations	579	5	1. Acute septic	Septic; delirious pre-admission.
			1. Chron. septic	Amputation would have been better.
			2. Chronic suppuration	Do. Do.
			1. Syncope	When convalescent.
C. Joint operations	140	2	1. Exhaustion	Better to have amputated.
			1. Tubercular meningitis	—
D. Amputations	106	4	1. Gangrene	Other leg affected; also a blood lesion.
			1. Septic	Re-amputation for gangrene.
			1. Phthisis	—
			1. Shock	Hip-joint, complicated by preliminary resection.
E. Injuries ..	61	8	1. Tetanus	Simple fracture; femur became compound through carelessness.
			4. Shock	2. Brain injuries. 2. Severe mauling by bears.
			3. Exhaustion	Poison by snake-bite.
		1	Meningitis	Overlooked in compiling tables.
F. Tumours ..	864	15	1. Tetanus	—
			6. Septic	All from exhausting suppuration.
			6. Shock	1. An ovariotomy.
			2. Cerebral anæmia	See letterpress.
G. Tappings ..	384	8	Ascites	Independent of operation.
H. Reparative plastic	..	..	5. Septic	Hospitalism; 4 in 1882.
	..	..	1. Uræmic and septic	Abscess of kidney.
Incisions &c.	1,053	12	3. Exhaustion and septic	—
			2. Shock	1. Hernia; weak old man. 1. Reduction of prolapsus ani.
			1. Pneumonia	Ventral hernia; chill from spray. (?)
		1	?	Operation on sinus, 1882.
I. Calculus ..	40	8	1. Uræmia	Kidney disease.
			1. Tetanus	A weakly man.
			4. Septic Peritonitis	1. Details unknown. 1. Elderly; bad subject. 2. Very unexpected.
			1. Exhaustion	Diarrhœa &c.
			1. Shock	Due to hæmorrhage.
J. Foreign bodies ..	95	0	—	—
K. Unclassified minors ..	3,649	0	—	—
—	10,622	64	—	—

I. *Causes of death.*—When the eight ascites cases are deducted nearly all the remaining deaths are in some way connected with the surgical measures adopted. Especially is this true of the deaths from organismal causes. These may be divided into three classes: 1. Those in which acute sepsis was present before operation. There were two such cases: one was an abscess of kidney &c.;[1] the other was a patient with delirium and high fever from acute osteo-myelitis. 2. Those in which acute organismal fever followed operation. Such cases, except in Class I (calculus) have been conspicuous by their absence since 1882, in which year there were four in Class H (incisions &c.). 3. Those in which chronic septic processes or suppuration exhausted the patient. There have been twenty-one such. *a.* Of these, in thirteen there was both suppuration and septicity before operation; but, nevertheless, some lives might have been saved by more radical operations or more thoroughness in after-treatment. Thus, if amputation had been permitted by the patient or his friends, four lives might probably have been saved. *b.* The surgeons must be chiefly, if not entirely, responsible in those eight cases in which the skin was unbroken before operation. Thus the three cases of tetanus occurring within a few months of one another, one after castration for tumour, one after lithotomy, and one after fracture of the femur (which became compound while under treatment), indicate a failure in antiseptic precautions. So also do two cases of exhausting suppuration after removal of tumours and three after operations for hernia and nerve stretching. No deaths from pyæmia or erysipelas have occurred.

II. *Shock.*—Of the seventeen patients who died from shock five succumbed to the severe injuries for which they were admitted; of the remainder one died after a hip-joint amputation, six were in connexion with very large tumours, some of which were scarcely suitable for operation. One case only could be called quite unexpected; it was a young child with severe prolapsus ani, which was reduced, and a rectal stricture dilated; death occurred during the following night. As might be expected, these deaths from shock happened in the old and the weakly. In a large hospital practice many such have to be operated upon; and the caution which would have refused to operate on some of the above fatal cases would also have left very considerable numbers of other patients unrelieved, such as the old persons with epithelioma, and young ones exhausted by prolonged suppuration. It is nevertheless true that careful discrimination might have rejected at least five, and that more skilful surgery might have saved at least six of these fatal cases.

III. *Exhaustion.*—As a cause of death this is often connected with sepsis on the one hand and badly selected cases for operation on the other. Some of the elderly and weakly patients escaped death from shock only to die by slow exhaustion. Careful nursing, good feeding, &c., can do much to ward off exhaustion. How many cases have been seen of prolonged suppuration after joint or tumour excision in which the patient, in spite of every attention, gradually wasted to a shadow; and yet the tide turned and floated him gently up to the haven of health. There can be no doubt that the splendid position of the hospital and its fresh mountain air have much to do with such recoveries; still greater stress perhaps is to be laid on the fact that all the dressing of in-patients is performed by the surgeons themselves, and never relegated to dressers or ward assistants.

IV. *Other causes.*—Among these we have eight cases of ascites, two of tubercular disease, one of uræmia, one of pneumonia, one of syncope when convalescent, one of gangrene of another limb than that operated upon, three of snake-bite, and one of unknown cause in 1882. In these deaths it is very difficult to recognise their relation to the operations performed. Even in the case of the ascites cases, tapping may have precipitated the fatal result. An amputation at the ankle, although healed by first intention, undoubtedly aggravated the lung disease from which the patient sank. An erasion of the knee-joint, which did well locally, was probably connected with the fatal tubercular meningitis. The case of pneumonia may well have been due to the carbolic spray upon the surface of the abdomen during an operation for ventral hernia in a patient with mitral disease. Careful inquiry as regards the other deaths would probably reveal some oversight or error in the treatment, or else make it clear that the case was not a suitable one for operative treatment.

It is impossible to indicate here in any detail the ratio of mortality to *major* operations. These may be estimated approximately at 3000, with a mortality of 2 per cent. Of about 500 major operations on bones the mortality was 1 per cent.; on 76 joint excisions, or arthrectomies, 2·6 per cent.; on 49 major amputations, 8½ per cent.; on 306 malignant tumours, 3·6 per cent.; on the excision of 483 simple tumours (including three ovariotomies), ·5 per cent.; on 180 nerve stretchings for leprosy, 2·2 per cent. (of the last 133 of these the mortality was *nil*); of 52 operations for radical cure of hernia by our modification of Spanton's method none were fatal; of 15 operations by the open method, with excision of the sac, 4 died; of 27 urethrotomies for stricture, none died; and of 5 abdominal sections for exploratory purposes none died; of 40 cases of calculus vesicæ the mortality was 20 per cent. The mortality taken by years has varied greatly, from 2·5 per cent. in 1882 to ·05 per cent. in 1888. If the year 1882 were excluded and the year 1890 included, the figures would be 13,000 operations, or about 3400 major operations, with 29 deaths—a mortality of ·85 per cent.

Kashmir.

[1] See THE LANCET, vol. i. 1886, p. 201.

THE HYDERABAD CHLOROFORM COMMISSION AND DR. ARTHUR CUSHNY'S ARTICLE ON CHLOROFORM AND ETHER.

BY SURGEON-MAJOR EDWARD LAWRIE,
PRESIDENT OF THE COMMISSION.

THE article on chloroform and ether by Dr. Arthur R. Cushny in THE LANCET of March 14th, 1891, is a valuable and opportune contribution to the literature of anæsthetics, and is especially welcome to the Hyderabad Commission. He agrees with us in so many important particulars that it is impossible to regard him as anything else than an ally, and though the cause of the Commission does not require bolstering, Dr. Cushny's experiments and report are the best support we have had yet. He agrees with us that the effect of ether is precisely similar to that of chloroform, only less intense, and that it is very difficult to produce narcosis at all with ether apart from asphyxia. On the practical question he says, "in ordinary chloroform administration such a simultaneous paralysis of the heart and respiration can never occur," and he further states that "no such sudden falls of pressure were seen as have been noted by some critics of the Commission, which is perhaps to be explained by the abundant and uninterrupted supply of air to the lungs." On all these points Dr. Cushny is clearly a friend to be welcomed. Where he appears to be wrong is in overlooking the effect of the residual chloroform in the lungs after he has finished pumping chloroform into the trachea. It is obvious that artificial respiration must be much more likely to fail when the air in the lungs is saturated with chloroform than when it only holds a very small proportion of the poison. The Hyderabad Commission succeeded in giving chloroform, by the ordinary method of inhalation, in such a dose that artificial respiration failed to get rid of it quickly enough to save the animal's life. This occurred in dogs; and in dogs, with Dr. Cushny, artificial respiration was always successful. In these cases he must allow that the inspired air was fully saturated, and in all of them every bystander, including THE LANCET'S chosen representative, Dr. Lauder Brunton, was satisfied that the heart continued to beat after, generally long after, the respiration had ceased. Whether or how far the Hyderabad Commission experimented with dilute chloroform is a matter of no consequence. We tried concentrated vapour, in which alone Dr. Cushny can find any danger. We are quite agreed that extreme concentration is dangerous, but this is so because it leads to the rapid intake of an overdose, and not because there is any action on the heart peculiar to any particular degree of concentration. The Hyderabad Commission's experiments, where chloroform was injected into the large veins of the neck, show that even pure chloroform in the blood does not stop the heart till after it has paralysed the respiration. It is abundantly proved that diluted chloroform, provided it is not too dilute, gradually causes an accumulation of chloroform in the blood sufficient to produce first narcosis, then cessation of the respiration, and finally death. A higher concentration can only bring about the same sequence of events in a shorter time. The higher concentration cannot have any action on the heart peculiar to itself, unless it be that the more concentrated vapour gives rise to spasm of the bronchioles, or in some other way impedes the oxygenation of the blood, and so, *pace* Professor MacWilliam, affects the heart injuriously. It is impossible that the concentrated vapour can act upon the heart in a mysterious way before it gets into the blood. It is clear also that the harmless dilute vapour must in time accumulate in the blood, otherwise it could not bring about narcosis and cessation of the respiration. But we may well inquire why, when this point is reached, it does not then have the same effect as the concentrated vapour? The truth is that the concentrated vapour interferes with natural respiration and the natural oxygenation of the blood; and in the Hyderabad Commission's report and in that of Dr. Cushny, it is remarkable that there is an utter want of uniformity in all experiments where normal respiration is interfered with, and complete uniformity in all experiments with chloroform inhaled in the natural way. The concentrated vapour of chloroform cannot be voluntarily inhaled by man or by animals. When a patient or an animal is forced to inhale concentrated vapour involuntarily, or if it is pumped into the trachea, the danger lies in the fact that when it is desired to stop giving the chloroform it is entirely beyond control, and though the administration be discontinued, the discontinuance does not actually commence until the residual amount far down in the lungs has been got rid of. Long before this can be effected, either by artificial respiration or in any other way, the patient may be dead. Dr. Cushny and the Hyderabad Commission are in complete accord with regard to the practical administration of chloroform, and have the same object in view. That object is the dilution of the anæsthetic to a point consistent at once with full anæsthesia and with safety. Dr. Cushny attains this end by means of an apparatus. The Hyderabad Commission attains it with equal certainty by giving the chloroform in such a manner as to ensure normal regularity of the respiration. Lister has demonstrated that the strength of vapour which can be naturally inhaled on an open cone or on a towel is from 2 to 4 per cent. With regular breathing, if the number of respirations and the number of cubic feet of air inspired in a minute are known, the dose of chloroform inhaled in a given time can be estimated with almost uniform accuracy. But if the breathing is irregular, the intake of chloroform will be variable and uncertain, and there will be danger in proportion to the uncertainty of the dose. Lastly, if the vapour is concentrated so as to compel the patient to struggle and hold his breath, the risk of overdosing is enormous. Asphyxia ensues and leads to deep gasping inspirations and rapid, and, it may be, irremediable, poisoning. It follows from these considerations that the strongest vapour of chloroform which can be inhaled with regular natural breathing constitutes the safe dilution of the anæsthetic, and that the most trustworthy as well as the most universally manageable guide to safe dilution must be regular respiration. The essential factors in chloroform administration are diluted chloroform and regular breathing, but whatever be the degree of dilution regular respiration alone ensures a measured dose and alone maintains regularity of the heart's action and of the circulation. The sole *raison d'être* of an apparatus is to determine safe dilution. But as this is definitely determined by regular respiration, and as regularity of the breathing ought to be assured in chloroform inhalation whether an apparatus is employed or not, it is evident that an apparatus is superfluous. Theoretically the Hyderabad Commission has no objection to any forms of apparatus or inhaler, except that no apparatus can ensure regular breathing; but practically we know that their complicated nature demands some of the chloroformist's attention and may lead to neglect of the all-important respiration. An apparatus is therefore not only superfluous, but introduces an element of danger into the administration. To keep the patient's breathing absolutely regular during the inhalation of chloroform, and to sustain the necessary watchfulness for the warnings afforded by the respiration and by the reflexes whereby overdosing can be avoided, require the undivided and unceasing attention of the chloroformist.

I trust I have made it clear that the Hyderabad Commission has no intention of criticising Dr. Cushny's admirable work in anything but the most friendly spirit. We are thoroughly satisfied. Dr. Cushny may still think that there is theoretical danger to the heart, but he is constrained to admit that it could not occur in practice. Having got so far, we venture to express a confident hope that he will continue his experiments and observations, and that he will yet see his way to accepting the whole truth.

SOME REMARKS ON PREMATURE BALDNESS (IDIOPATHIC).

BY W. JOSEPH TYSON, M.D.

THE increasing prevalence of premature baldness is a subject which requires more attention from recognised physicians and surgeons than it has hitherto received. It is curious to note that the treatment of baldness, like that of corns, has fallen almost entirely into the hands of quacks; perhaps because we have looked upon both diseases as too common, and therefore unworthy of our notice, yet the former condition is a great cosmetic defect, and the presence of the latter one of our most constant annoyances. Among many points connected with this subject the following must be borne in mind: 1. Baldness is more common in men

than in women. 2. Baldness on the face is unusual. 3. Heredity is said to influence baldness; at the same time it must be remembered that sisters of the hereditary victims to baldness can generally show a good growth of hair, notwithstanding the fact that they must have equally inherited the tendency to baldness. 4. The growth of the beard has been thought by some to influence the head baldness, but it is forgotten that the same quantity of hair, if not more, is grown when the beard is shaved; and, if we may judge from pictures and statues, long beards and luxuriant heads of hair were often found together in our ancestors. 5. Excessive brain work has been considered a cause of baldness. Doubtless there is relatively more baldness among brain workers than manual labourers, but this cause can only be a partial one, otherwise we should meet with the effect more frequently in persons wholly given up to mental work. 6. Another cause which has been given, and certainly seems to play some part in the destruction of the hair, is that of dissolute habits, especially indulgence in alcohol. Care and worry would appear to have the same effect. 7. The most natural and principal cause, though not the sole one, would seem to be the constant covering of the hair. Women, as stated before, retain their hair much longer than men; and if we consider their head-gear we shall find a partial explanation.

Women more frequently than men go without a head-covering, in the upper classes, perhaps principally to avoid disarranging the dressing of the hair, whilst in the lower classes a small handkerchief often suffices; and even when a more elaborate covering is worn, it is of the lightest description, usually of straw. At the present moment a flower or leaf is deemed sufficient. Thus, with women, a thorough ventilation through the hair is constantly taking place, and the perspiration, which when retained is injurious, rapidly passes off. What a difference we find if we consider what men usually wear: a thick felt hat, generally unventilated, lined inside, at the top with silk, in the lower part with leather, fitting closely round the forehead and the back of the head, necessarily interfering to some extent with the circulation. I have made a few inquiries as to the condition of the hair among barristers who are constantly wearing wigs, and I find, as a body, they suffer from more than the average baldness. It is noteworthy that the only parts thoroughly exposed to the air at nights are the face and head, these being more or less covered with hair. The position of usual baldness is at the top of the head, the part more closely covered than any other. Greyness, on the other hand, generally begins at the temples or sides of the head, spreading thence over the whole scalp. Cold weather and exposure to the air seem to increase the growth of the hair. This is especially observable in the lower animals, as in horses and sheep, in which the hair grows strongest in the winter and comes out in summer, contrary to the law of growth in the vegetable world. Coachmen and others who have the care of horses recognise this fact, for when anxious to obtain a fine silky coat they invariably use a horsecloth. Probably the principal cause of the difference in fineness between the hair of a well-bred horse and that of a cart- or dray-horse, apart from heredity, is that the coat of the one is much more exposed to the air than that of the other.

It has been remarked that among men fine hair is a sign of good breeding. I think the explanation of this is, that when no manual labour has been undertaken for three or four generations there are usually present the causes which produce this condition—viz., mental work, which in itself involves staying in-doors for the most part and consequently little exposure to the air, and also that of heredity. Shakespeare, in his "Comedy of Errors," makes Dromio say that "since beasts are deficient in wit, Nature by way of compensation has bestowed on them a greater abundance of hair." But this it would be hard to prove. I have turned over many books on skin diseases, but it is disappointing to find how little has been written either about the cause or the treatment of premature baldness; some authors do not even mention the subject. I would sum up the causes in the following order—(1) Insufficient exposure of the hair; (2) influence of heredity; (3) excessive mental work and great anxiety; (4) venereal and alcoholic excesses; (5) constant washing and want of pomade. It is exceedingly difficult to estimate each cause at its true value; I would not, therefore, speak dogmatically either of the order or the exact part which each cause plays. The treatment I would recommend is the following:—

Children, as much as possible, should do without caps, and hats when worn should be of the lightest description. During the hot season, which in this country lasts only a very short time, a stouter hat is necessary for the prevention of sunstroke. A head covering should never be worn in-doors, in trains, or in closed carriages. The kind of material employed is of importance. In summer and still weather straw appears to be the best, on account of its lightness and permeability. In winter, hats made of light felt, well ventilated and unlined, are to be recommended. The ordinary tall hat, and the thick, heavy, unventilated top hat, cannot be too strongly condemned. At the same time I am not blind to the æsthetic effects of the former, and I fear that unless some very powerful influence is brought to bear against it, the tall hat will continue to hold away, except amongst those whom fortune or other causes render independent of public opinion. Much more might be added under this heading, but enough has been said in outline to show what I consider the best method of treating premature baldness. The second cause (heredity) is outside practical treatment, so I leave it. Nos. 3 and 4 include a very wide range of treatment, and each case would have to be taken on its merits and considered in detail. I believe that a disturbing nervous influence (trophoneurosis) plays an important part in baldness. In those cases of rapid universal baldness which are not now under consideration, the above cause is a most marked one.[1] Alopecia due to syphilis does not strictly come under notice, as it should be placed under the heading "alopecia prematura symptomatica," which is a symptom and the result of a definite organic disease of the cutaneous structures, especially of the hair-follicles, or even of the hairs themselves.

In concluding my short notes, I must mention a few apparently minor points of treatment which should not be forgotten. Too constant washing of the hair is unnecessary, as well as harmful. I believe once a week is quite often enough for cleanliness, as well as for maintaining the strength of the hair. The same remark applies to constant brushing, for continual brushing, especially with hard brushes, should be avoided. There is a common notion that greasing the hair is vulgar; so many persons fall into the other extreme, and never apply any pomade at all. After the hair has been washed it is certainly beneficial to apply some form of simple grease or oil. When the head-hair is becoming rapidly thinned, some stimulating material, such as ammonia and cantharides, added to the oil will increase its good effects. The term "idiopathic" is given to the above form of baldness, because it is supposed not to depend apparently upon any exciting cause. These notes are entirely clinical in character. I have advanced no novel suggestions as regards a cure, for I believe they are but few and of no great importance; but my own observation and experience lead me to say that the real treatment of the complaint lies in the direction of prevention, and that the rules given only cursorily in this paper would if carried out in detail do much to stay the increasing amount of baldness we are now suffering from.

Folkestone.

A CASE OF BLOOD-POISONING, POSSIBLY SYPHILITIC.

BY EDWARD GROUND, B.A., M.D.CANTAB.

THE following case occurred in a patient, aged twenty-two years, in the naval service. He had always enjoyed excellent health and was at his home in July, 1888, and was then quite strong and well. About the beginning of the second week in September he noticed that he had some hard lumps in his head, which gradually increased in size and number, but were quite painless; about a fortnight later he felt as if his throat were getting choked up, and had slight difficulty, but no pain, in swallowing, and began to vomit his breakfast every morning. He also noticed that his neck was beginning to swell. He returned home on Sept. 29th, when I saw him for the first time. He assured me that he had not exposed himself to the risk of contracting syphilis in the ordinary way, but he was stationed on board a badly appointed ship, with many brother officers,

[1] See my paper in the Trans. Clin. Soc., 1886.

and obliged to use the same washing and drinking appliances, so that there was the possibility of accidental inoculation. On examining his head I found a number of periosteal swellings, varying in size from a pea to a cob-nut, hard and quite painless; the skin over two or three of the larger ones being reddened and presenting the characteristic appearances of ordinary nodes; the neck was greatly swollen from induration and enlargement of the cervical glands on both sides. The left axillary glands were also enlarged, but not the right. The tonsils were very large, so that they met in the centre, were superficially ulcerated, and covered with the whitish surface characteristic of syphilitic ulcers on the mucous membrane of the mouth, and very hard to the touch. He had noticed two or three days previously that the left side of his face felt stiff, and his left arm and leg slightly numb. I observed that he had slight left facial paralysis of all the muscles of expression and dilatation of the left pupil, which acted sluggishly to light. He had no rash upon his body, and no primary sore could be found after a careful search. He complained a good deal at first of pain along the course of both sciatics, which became worse when he was in bed. He was ordered iodide of potassium, and used a gargle of black wash. He could only swallow minced and liquid food on account of the swollen tonsils, and was occasionally sick. On Oct. 6th he took a solution of bichloride of mercury in addition to the iodide. On the 14th I first noticed a slight dusky, purplish mottling upon the chest, abdomen, and back, which by the 19th had assumed the characteristic features of a papular syphilide. At the first appearance of the rash mercurial inunction was commenced, and was continued until the gums became tender and the teeth felt loose. Under this treatment he improved rapidly, and was kept under the gentle influence of mercurials, calomel fumigations being resorted to after the tenderness of the gums had subsided, until Nov. 20th, by which time the rash had disappeared, the nodes much diminished, the glands only slightly enlarged, and the tonsils nearly of normal size. The facial paralysis was not noticeable, but the left pupil remained dilated. In spite of this improvement the sickness, which had been very troublesome from the commencement, still continued, and was only relieved at last by spraying the throat with cocaine. He had become much emaciated and suffered from great prostration and dryness of the mouth, a prominent and troublesome feature throughout his illness, which prevented him from taking solid food, and appeared to be due to inactivity of the salivary glands. His pulse from the commencement of the disease was quick, generally about 120, but subsided to 100 per minute after the decrease of the glandular swellings in the neck, but was always very feeble. His temperature was frequently taken, but was never above normal, and on the last occasion that his urine was examined (Nov. 23rd) it was free from albumen and sugar. From Nov. 26th until Dec. 10th, not being troubled with sickness, he took a considerable quantity of liquid and a little solid food, but the prostration and emaciation became more marked. About this time I first observed a slight bluish discolouration of the mucous membrane of the lower lips, and dusky bluish discolouration appeared in the skin of the abdomen and chest. On Dec. 19th he was seen in consultation by Mr. Jonathan Hutchinson, who expressed doubt as to the case being syphilitic, although admitting that the history of nodes, rash, enlarged tonsils, and the disappearance of all three under specific treatment, appeared to be evidence strongly in favour of that view. He remarked that the tonsils were normal, that there was no rash, and only slight evidence of the periosteal swellings in the skull, but that the skin of the body presented large, ill-defined, darkish stains, suggesting the possibility of Addison's disease. Mr. Hutchinson gave a very unfavourable prognosis, and towards the end of December symptoms of disorganistation of the lungs commenced, and death took place on Jan. 21st after an illness of about four months.

The post-mortem examination, which was kindly made by Mr. Tuckett of the West Kent Hospital, revealed extreme emaciation of the body, extensive disorganisation of the lungs, with large cavities in both upper lobes containing pus, and smaller cavities; consolidation and foci of incipient gangrene in the lower lobes; enlargement of the spleen; great enlargement of both kidneys, which presented the appearances of amyloid degeneration, and the supra-renal bodies were rather large, and imbedded in dense fibrous tissue, by which they were adherent to the kidneys. Dr. Smith, Medical Registrar of the London Hospital, was kind enough to examine sections of the various organs under the microscope. He observed great fibro-cellular infiltration in the portal canals, which nearly obliterated the vessels, and scattered amongst the lobules small masses of fibro-cellular tissue. In one mesenteric gland a microscopic gumma was found. The kidneys displayed the same enormous overgrowth of fibro-cellular material between the tubules, the Malpighian tufts being apparently obliterated in places from pressure. No definite change in the supra-renal capsules. He further states: "In my opinion, syphilis is the only recognised disease which could account for the changes in the liver and kidneys—i.e., fibro-cellular infiltration without further destructive changes." After receiving the account of the post-mortem and microscopic examinations, Mr. Hutchinson expressed great doubt as to the case being syphilitic, but thought that it was probably some unrecognised form of acute blood-poisoning with a rash deceptively like a syphilide. That if it were syphilis it no doubt originated in the tonsils, although primary sores in the tonsils are very rare, adding that he had never seen symmetrical chancres in the tonsils.

Remarks.—The huge tonsils, enlarged glands, and periosteal nodes, followed by a distinct papular rash presenting all the appearances of a secondary syphilide, with disappearance under the use of mercury, together with the microscopic evidence, are strongly in favour of syphilis; and if the case were of syphilitic origin, it appears to be unique in the annals of that disease, for it is remarkable that periosteal nodes, which occur late in the disease as a "tertiary" phenomenon, should occur some four or five weeks before the "secondary" rash. The close connexion of the supra-renal bodies with the ganglionic centres in the abdomen and with the pneumogastric and phrenic nerves was probably seriously interfered with by the dense masses of fibrous tissue which embedded the supra-renals, and which no doubt pressed upon and interfered with the functions of the nerve branches passing to these organs. In this way the discolouration of the skin, suggesting Addison's disease, with debility and prostration ending in suppurative disorganisation of the lungs, can be accounted for, after all the outward signs of the disease had disappeared, and when in an ordinary case of syphilis one would hope and expect to find improvement. In conclusion, I may say that I was not doubtful as to the syphilitic nature of the case until I heard the opinion of one of the greatest living authorities upon that disease.

Maidstone.

HEPATIC ABSCESS.

By SURGEON WILLIAM A. MORRIS, M.S.,
ADJUTANT, VOLUNTEER MEDICAL STAFF CORPS.

SOME three years ago I read with great interest an article in THE LANCET on this subject; and I venture to record my personal impressions and experience of this affection, as the conclusions I have arrived at are in some respects at variance with those advocated by Mr. Hatch. Mr. Hatch concludes that the use of the aspirator has been superseded by the knife in cases of liver abscess, and follows this statement by setting forth the desirability of early operation. To quote his own words: "Abscess of the liver is now treated like any other abscess." The cases with which I have had to deal have occurred among Europeans, and so far my experience is different from Mr. Hatch, whose patients were natives of the country. In the first place, with regard to the desirability of early operation. It is by no means easy, except in very few cases, to absolutely detect the presence of liver abscess, much less its locality; the right lobe is the most common part affected, and this, as is well known, is covered in by ribs and costal cartilages over the greater part of its extent, and unless the abscess be situated at the exposed part, it is very difficult to localise it in its early stages. The generality of cases where the abscess points externally is when they occur in the left lobe. Abscess of the liver is a most insidious disease, and is often completely unattended by any symptoms beyond general malaise, fulness in the hepatic region, &c. The painful affections of the liver are more or less connected with its superficial

surface and capsule, and in the case of abscess pain is, when present, a valuable indication of its position, but the majority of cases occur in the covered portion of the right lobe, and have a general tendency upwards towards the diaphragm. It is a matter of history how fatal a disease hepatic abscess is, especially after operation has taken place, the order of recovery being first those which burst through the lung, and next those into the intestine. Abscesses in this region are seldom single, and pyæmic abscess may be considered fatal. The ordinary tropical abscess may be single, and if superficial and aspirated early will probably lead to recovery, but this is far from the usual tendency of these cases. Most of the cases which recover are probably single abscesses which during an early stage burst through the lung or into the intestine; and I would venture to assert that, with very limited exceptions, operative interference would greatly increase their danger. Much has been written and reported on puncture of the liver in hepatitis. There is no question that this operation does relieve pain and congestion, but I am aware of no evidence to show that the small amount of blood removed has ever prevented the development of abscess. I am more inclined to follow Surgeon-General Maclean's advice and let the patient retain all the blood he can. It is the great want of vitality and power to resist disease that the medical officer has to contend against, and all treatment should be given to support and keep up the patient's general health, to enable him to maintain himself against his disease. Mr. Hatch has only spoken of abscess in the singular, but these form a very considerable minority of the cases usually met and accounted for by post-mortem examination. In the service this disease is often detected in its early stages, owing to the medical officer being so much "in touch" with his charge, and the men themselves on feeling ill report sick, and are at once admitted. From the number of admissions per annum under the heading "hepatitis in India," it would be reasonable to suppose that many cases are cured by ordinary means, which under other circumstances would have developed into abscess. The free use of the knife in these cases I am convinced is not the most effective manner in which to deal with these cases, and even in cases where the abscess is superficial and has been localised aspiration should first be tried. To an abscess about to point, and where the symptoms show that it will point externally, it has been my practice to aspirate by a valvular opening in the skin and under strictly antiseptic precautions. The operation is a slight one, and can be repeated without causing much shock to the system. Before aspiration, I think there should be no doubt that adhesion has taken place between the outer wall of the abscess and the abdominal parietes, in order to prevent the possible escape of pus into the peritoneal sac, a danger of greater importance in India than it is usually considered at home. There is another misleading occurrence in this operation, and that is in cases where there is more than one abscess, but only one is apparent. By relieving the one, the tension is taken off the other, and there is an immediate amelioration of the patient's condition. A few days later the temperature rises and the patient relapses, and the tendency is to lay the abscess already aspirated open with the knife. Death supervenes, and the necropsy reveals a second abscess whose position could not have been diagnosed during life. I consider that the knife should not be used except with the limitations already mentioned, and its use, as recommended by Mr. Hatch, should be much modified, as it can only tend to greatly increase the danger of this serious affection.

King William-street, W.C.

ROYAL DERBY AND DERBYSHIRE NURSING AND SANITARY ASSOCIATION.—The mayor of the borough (Sir Alfred Haslam) presided at the annual meeting held in Derby on the 10th inst. The report submitted for the past year shows that £2106 had been received for the services of the nurses. Although the staff had been decreased, there were eleven probationers. Besides their wages, the staff had received sums amounting to £204 in bonuses. During the past twelve months 441 families had been supplied with nurses. It appears from the statement of accounts there was a balance in hand of £418 8s., the largest balance since the institution was started. The report was adopted.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

TWO CASES ILLUSTRATING THE PATHOLOGY AND OPERATIVE TREATMENT OF SIMPLE FRACTURE OF THE PATELLA.

(Under the care of Mr. JOHN CROFT.)

FACTS with regard to the material obstacles to synostosis after fracture of the patella are so much needed that we venture to put the two following cases on record. It is not an uncommon experience in the primary treatment of simple transverse fractures to bring the fragments into what is apparently close contact. The surgeon expects that bony union will be the result. It is, however, a too common experience to find that, after all, bone union has first failed to occur. Close ligamentous union seems to the surgeon to be as good as a bony one; but in the course of a few weeks or months the patient finds that so far as he is concerned the result leaves a great deal to be desired. Many causes have been given for such want of success and almost all those causes have been theoretical, not to say imaginary, and not causes which have been positively witnessed by the naked eye. In 1883 Sir Joseph Lister and Mr. Macewen dealt with the subject of the causes which prevent primary bony union in cases of simple transverse fracture. For the facts put forward by the former see THE LANCET of Nov. 3rd, 1883, and for the communication of the latter surgeon see THE LANCET of Nov. 17th, 1883. Both authors directed attention to the part played by the traumatic interposition of aponeurosis and fibrous tissue between the portions of the broken bone. Each found in the cases of recent fractures in which he had opened the joint that torn aponeurosis and fibrous tissue formed material and positive obstacles to bony union. Aponeurosis of the quadriceps extensor had been torn off the patella, and had become inserted between the fragments of bone, so that the broken surface of one or other piece was covered and masked by a more or less thick tongue of strong fibrous tissue. Had not this last been lifted out of its position, bony union must have been prevented. The two cases which we quote are the first on which Mr. Croft has sutured the fragments by the open operation, and he regrets that he had not earlier resorted to this method of treatment. It will be seen that in each case he found that a thick tongue-shaped piece of aponeurosis had been torn from the front surface of the upper fragment, and had become so interposed between the fragments that it was closely applied over the broken surface of the lower fragment. The fracture surfaces could not be brought into contact so long as the interposed aponeurosis remained where it was, and it could only be restored to its place by a surgical operation.

Before operating on these patients it seemed to be not difficult to force the separated pieces of the patella into near if not in close contact. The contact was apparent and not real. It was an entire delusion to suppose that the fragments came into contact. Mr. Croft feels convinced that many surgeons have been deceived in the same manner, and hence have not obtained those good results which they had anticipated. Comparing this open operation with other operative treatment, it becomes obvious that it has merits which no other mode of treatment possesses. The treatment by Malgaigne's hooks could not have brought about certain immediate bony union in either case, and as to union by bone as a secondary process in such cases, that is a theory to which one pays little respect. It is equally certain that Kocher's wire ligature would have similarly failed to obtain anything more than a fibrous union, and it is also certain that Mayo Robson's plan would have failed in like manner. We may also point out that aspiration would have been quite useless with reference to bony union. When this last mode of treatment is studied by the aid of the facts of

these two cases, it becomes clear that any good obtained by aspiration of the fluid in the joint is an accidental good, and not one to be depended upon. Clotted blood thickly adhered to the broken surface of the upper fragment, and no amount of aspiration could have removed it. It formed another definite obstacle to immediate bony union.

The two cases were admitted under Mr. Croft's care in St. Thomas's Hospital on two following days in April, 1891—viz., the 21st and 22nd. They were suffering from similar injuries—recent, simple, transverse fracture of the patella, the bone in each case being divided into unequal halves, the lower half being the smaller. There had not been any direct violence in either case. In both there was a swollen blood-discoloured state of the knee from considerable effusion of blood into its cavity. The separation of the fragments was about three-quarters of an inch. It appeared to Mr. Croft and others that the pieces of bone could be pressed into very near, if not close, contact. In one case the operation was done on the day following the injury, and in the other case the operation was delayed until the fifth day on account of a mild attack of albuminuria. The patient's urine was free from albumen when the operation was performed. The operation was similar in each case, and therefore one description will serve for the two. After proper antiseptic preparation of the limb a longitudinal incision was made long enough to expose both fragments of bone, and deep enough to open up the joint. A large quantity of fluid and coagulated blood was cleared away from the torn surfaces and from the cavity of the joint. In each case the fracture surface of the upper piece of the patella was thickly furred over with coagulum. In the fifth-day case there was a thick, firm layer of laminating clot on the fracture surface, and this could only be removed by scraping. The lower fragment was at first invisible, and only came into view when the soft parts which had fallen in over its raw surface had been lifted out. A thick tongue-shaped piece of the aponeurosis of the external quadriceps had been torn from the surface of the upper fragment, and had become so wedged into the intercondyloid space that it quite masked the lower fragment, and it served as a complete and material obstacle to the close approximation of the fragments, and of course to their bony union. When, in each case, this mass of aponeurosis and fibrous tissue was held aside the cavity of the joint was cleared, and the sutures inserted. A simple suture of double stout silver wire was used on each case to suture the pieces of bone, and these were brought into close contact without any serious tension. The edges of the aponeurosis were trimmed and sutured by several silk sutures. The edges of the torn "bursa" were also trimmed, and its cavity was cleared. In each patient a counter-opening on the outer side of the knee was made to drain both bursa and joint. The wound was sutured in the ordinary way, and a small drain established on its centre. The parts were dressed antiseptically and immobilised. As regards the after progress little need be said, as the main interest about the cases is in their demonstration that the chief obstacles to bony union in instances of similar fracture of the patella is in the interposition of a more or less thick tongue of aponeurosis and fascia between the fragments. Neither man suffered any constitutional disturbance. One had a little local temporary uneasiness. In each case strong bony union took place in about a month's time. The younger, healthier, and pluckier man has, as might have been expected, made the more rapid recovery, and regained the use of his joint. The other man, who suffered from albuminuria at the time of the accident, and who is not at all self-helpful, still needs to have passive movements of the joints forced upon him. That, however, does not affect the fact that his fractured patella has firmly reunited by bone.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

ANEURYSM: SIX CASES OF LIGATURE OF THE MAIN ARTERIES.

(Under the care of Mr. O'CONNELL RAYE.)

PUBLISHED statistics of operations on the large arteries being mainly derived from the experience of pre-antiseptic days, are necessarily somewhat misleading to the modern surgeon. These operations being comparatively uncommon, the number falling to the lot of any individual is small, and statistics can therefore be but slowly collected. The following cases do not present any very remarkable features, but are published as a contribution to the records of more recent operations. They include all the cases of ligature of the larger vessels which occurred in Mr. Raye's wards in the Medical College Hospital, Calcutta, during the past ten years. Of these cases, five were operations for aneurysm and one for recurrent hæmorrhage. The wards contain eighty beds, and as but five cases of aneurysm entered them in ten years, the disease must be more rare in Lower Bengal than in most parts of Europe. In three of the five cases of aneurysm the treatment was commenced with compression, but from various causes this had to be abandoned in favour of ligature. All these cases so treated recovered without any trouble. In a fourth case the artery was ligatured without any previous compression. This case also ultimately recovered, but the leg was on the verge of gangrene. Mr. Raye's cases are too few to draw reliable conclusions from, but the inference seems to be that compression is still the safest mode of treatment, and that even when it has ultimately to be abandoned its temporary use is of advantage in so far as it prepares the way for establishment of the collateral circulation.

CASE 1.—A Hindoo male, aged thirty, of spare habit, was admitted with an aneurysm in the left axilla about the size of an orange. Duration four months. Pressure over the subclavian easily controlled the pulsation. Digital pressure was therefore attempted, and kept up for about two hours. Owing to lack of proper assistants this treatment had to be abandoned. The aneurysm felt slightly firmer after the pressure. Two days later the subclavian was exposed and tied in its third stage. The vein gave no trouble. The artery was ligatured with catgut, tied firmly. Pulsation at once ceased in the tumour, and did not return. A catgut drain was introduced into the wound, which was then closed. The wound healed by first intention. The operation was performed on the 22nd of October, 1883, and the patient discharged cured Feb. 1st, 1884.

CASE 2.—A Eurasian male, aged thirty-three, healthy, of slight build. Three months previous to admission he slipped in crossing a threshold, and felt immediate pain in the back of the knee. A few days later he noticed a swelling in the popliteal space, which slowly increased until the time of his coming to hospital, when it was found to be as big as a hen's egg. It was extremely painful and caused sleepless nights. Compression of the femoral stopped the pulsation, and likewise gave immediate relief from pain. Digital compression of the femoral was carried out by relays of students for three hours. The patient, a nervous, irritable man, then absolutely refused to allow this treatment to be continued, although his pain was thereby much relieved. Two days later he was persuaded to allow another trial of compression, but after a couple of hours it had to be discontinued on his refusal to submit further. After an interval of three days more a Carte's compressor was applied, but this the man at once rejected. Some benefit resulted from these compressions, as the tumour was rather more firm. Ultimately the superficial femoral was tied with catgut, the ligature being tightly drawn. A small catgut drain was placed in the wound, which was then closed. Pulsation in the tumour ceased at once, and did not recur. The dressings were removed on the eighth day, when the wound was found healed. The patient recovered without any troublesome symptom. He was seen two years later. A hardness about the size of an almond could be felt in the popliteal space. The leg was somewhat wasted, but in all respects serviceable. Operation performed Jan. 21st, 1885; discharged April 9th, 1885.

CASE 3.—A Hindoo male, aged thirty-five, greatly weakened by chronic malaria, admitted with a strongly pulsating aneurysm occupying the outer two-thirds of the iliac region parallel with and limited by Poupart's ligament, and about the size of a small cocoanut. The upper part of the tumour was in contact with the lower border of the greatly enlarged spleen. The patient stated that two months previously to his admission he had to walk some fifty miles over rough roads, suffering great fatigue. Two days subsequently he noticed a small lump above Poupart's ligament. This gave rise to an acute "bursting" pain. For a month the swelling remained stationary, but during the three weeks preceding his coming to hospital it rapidly increased in size. It continued intensely painful throughout its progress. The man was kept at absolute rest for a

week after admission, by which time his general condition had improved, and the pain had slightly diminished. Treatment was then commenced under chloroform by Reid's method, an Esmarch's bandage being applied from the toes up to, but not over, the aneurysm, and a tourniquet placed on the aorta, controlling as far as possible the flow of blood into the tumour. Within twenty minutes alarming syncope ensued, and the operation had to be abandoned. Next day the pain, hitherto excruciating, had almost ceased. The tumour was more firm, and somewhat shrunken possibly. No further improvement followed. Having waited for a fortnight's complete rest, the compression was again similarly applied, but this time it was found possible to arrange the abdominal tourniquet so as to press on the iliac artery only, and not on the aorta, the spleen having diminished sufficiently to admit of the pad being so adjusted. Complete compression was kept up for one hour and three-quarters, when it was thought advisable to discontinue it. No benefit resulted from this second compression. After a rest of another fortnight the compression was again applied as before, this time for an hour and a half. No observable benefit followed. Three trials of compression having been made with but little benefit, the external iliac was ligatured with kangaroo tendon tightly tied. The enlarged spleen limited the field of operation but did not cause any serious difficulty. A rubber drainage-tube was inserted and the wound closed. Severe cramp in the limb followed and lasted several hours. Pulsation did not return at any time in the tumour. Dressings were changed on the seventh day, when the tube was removed. The wound had then united except where the drain lay. This patient was detained in hospital for several weeks on account of his malaria and splenic enlargement; the tumour had then contracted to the size of a hen's egg and felt solid. Operation performed Nov. 3rd, 1887; patient discharged cured on Dec. 31st, 1887.

CASE 4.—An able-bodied Mohammedan seaman, aged thirty-two, admitted with an oval-shaped aneurysm tensely filling the left popliteal space. The man was in a state of extreme nervous excitement, restless and tossing from side to side; complaining of general discomfort and of great pain in the leg. He was kept under the influence of opium for a day, and the superficial femoral was ligatured on the following morning with kangaroo tendon. The knot was drawn with (it was believed) sufficient force to close the vessel but not to rupture its coats. The wound was then closed. When the first dressings were removed on the eighth day union had taken place. The pain in the limb at once ceased, but the nervous excitement continued for several days. Gangrene threatened, and for the first week the nourishment of the limb was imperilled. The loss of vitality finally limited itself to four patches of the skin on the front of the leg and one on the dorsum of the foot, each about the size of a shilling. Later on the distal phalanx of the great toe was found to have necrosed. The healing of these dead patches delayed the patients' discharge for several weeks. Some shrinking of the foot and stiffness of its joints remained, and still continues (six months after the operation). Operation performed on Aug. 30th, 1890; patient discharged cured Nov. 25th, 1890.

CASE 5.—A Hindoo male, aged fifty, admitted with an aneurysm of the left side of the neck. It filled up the hollow behind the lower jaw, and extended from the level of the hyoid bone to the mastoid process. On opening the mouth, it could be seen pulsating violently and bulging the wall of the pharynx inwards. It caused severe pain radiating up the side of the head, and a most distressing loud buzzing noise was also complained of. The common carotid was tied with kangaroo tendon, the ligature was fastened with slight tension with a view to closing, but not rupturing the coats of the artery. The jugular vein was not seen during the operation. The wound healed by first intention. The pain and the buzzing noise ceased at once. No cerebral symptom occurred. Operation performed on Aug. 30th, 1890.

CASE 6.—A Mohammedan female, aged fifty, admitted for recurrent hæmorrhage from a sloughing wound of the palm, inflicted eight days before she came to hospital. The state of the wound precluded all possibility of securing the vessel in the palm. The brachial was therefore ligatured. A high bifurcation was met with, and both trunks were tied with catgut. The wound healed by first intention. Operation performed on Feb. 24th, 1886; patient discharged cured on March 14th, 1886.

Remarks by Mr. O'CONNELL RAYE.—In two of these cases an attempt was made to tie the ligature with force only sufficient to close the lumen of the artery and not to rupture its coats. I cannot say whether this was actually done or not, for I do not possess *tactus eruditus* of sufficient refinement to allow me to speak with confidence. My impression is that it must be an extremely difficult thing for any operator to tell by the touch what amount of damage his ligature has inflicted on the vessel.

Reviews and Notices of Books.

Carlsbad; its Thermal Springs and how to use them. By J. KRAUS, M.D. Fourth Edition, Revised and Enlarged. London: Kegan Paul, Trench, Trübner, and Co. 1891.

DR. KRAUS issues the fourth edition of his well-known work on Carlsbad, with a prefatory note by Sir Joseph Fayrer, in which that distinguished physician says that "he holds Carlsbad, with its discipline and its waters, to be a remedy of great value, not only in many of the functional disorders of this country, but especially in a large number of those which obtain among persons who have resided in India or the tropics, and have suffered from the effects of their climates." Of the popularity of the famous Bohemian spa it is needless to speak. Carlsbad is probably the most popular watering-place on the Continent, and if our own countrymen have shown less appreciation of it than Germans, Austrians, Poles, Russians, and Jews, yet the number of English resorting thither is already large, and tending constantly to increase. Fashion counts for so much in the selection of a spa, and is so often capricious in its favours, that it is satisfactory to note the strong position occupied by a resort possessing such genuine merits, and at which so much sound therapeutical work is done, as Carlsbad. We may pass over the historical and antiquarian particulars in the work before us—details which often figure somewhat too largely in books upon health resorts,—and pass at once to the important question of the mineral constituents of the Carlsbad waters. In general terms it may be said that the numerous Carlsbad springs possess practically the same characteristics. They are all hot, the temperature varying in the different springs from about 120° to 160° F., the extremes being 95° and 162°. They are all strongly mineralised, containing about forty-one or forty-two grains of solid constituents per pound of water, and the chief ingredients are sulphate of soda, carbonate of soda, chloride of sodium, carbonate of lime, and sulphate of potash. The chief point of difference in the various springs is in the amount of free carbonic acid present, the cooler springs possessing more, and the hotter springs less, of this gas. In addition to free carbonic acid gas, the springs contain a large quantity of this gas in varying degrees of combination.

In addition to the drinking waters, Carlsbad has ample facilities for bathing. There are mineral baths at a temperature of 90° to 100° F., peat baths, the materials for which are brought by rail from Franzensbad, vapour and douche baths, steel baths, and acidulous baths. Carlsbad is also fortunate in possessing in the Giesshübler-Sauerbrunn an unlimited supply of an agreeable effervescing alkaline water suitable for table use. It contains a very large quantity of carbonic acid gas, both free and in combination.

The Carlsbad waters are especially recommended in abdominal complaints in general, except acute fevers, malignant degenerations, and tumours. They are also valuable in chlorosis, adiposis, gout, malaria, and diabetes, when not too far advanced. Dr. Kraus has also found great advantage from the waters in cases of chronic gastric

catarrh and in ulcer of the stomach. He seems to have had a very exceptional experience in the latter disease, inasmuch as he states that in 400 cases hæmorrhage during the treatment occurred in only a single instance. Gallstones seem often to be favourably influenced by a course of the Carlsbad waters. The kind of anæmia likely to be benefited by a stay at Carlsbad is that following gastric or abdominal derangement. Pure idiopathic anæmia and chlorosis can be much more advantagously treated at such chalybeate springs as Schwalbach, Pyrmont, Spa, or St. Moritz. The after-cachexia of malaria seems to be very favourably affected by a course of the Carlsbad waters. We naturally look with unusual interest to what Dr. Kraus has to say regarding the operation of the Carlsbad springs in those two important diseases—gout and diabetes. He is very emphatic, indeed, regarding the benefit to be obtained in the former of these maladies: "I am bound to say that Carlsbad is not only indicated in all cases of gout, but that the use of its waters is attended with the most remarkable results. It is necessary, however, that the cure should be watched with great care in all cases affecting weak and debilitated individuals, or if there is already disease of the kidneys, or if there is an affection of the arteries or arterioles. Gouty deposits capable of absorption will generally disappear during or soon after the use of the Carlsbad waters, but the latter have no influence whatever on chronic indurations." As regards diabetes, we are informed that patients suffering from this malady are resorting in ever-increasing numbers to Carlsbad, which is becoming known as "the great hospital for diabetes." Dr. Kraus believes that "the influence of the Carlsbad mineral waters on diabetes is highly beneficial ..... In every case, even of the greatest severity, a marked improvement in the condition begins after a few days' time ..... In lighter cases the diabetic symptoms disappear altogether, and the power of resistance is in many cases strengthened to such an extent that a mixed diet, at least for a time, may be resorted to without any striking relapse taking place. A yearly return to Carlsbad, however, will be absolutely necessary for these patients." It seems very doubtful, however, whether any fully developed case of true diabetes is ever completely cured by the Carlsbad waters. Dr. Kraus has seen two cases that "may, perhaps, be considered as perfectly cured." There is much prudence in the "perhaps."

The chief contra-indications regarding the use of the Carlsbad waters are the following: (1) Acute conditions generally, and especially if attended by high fever; (2) malignant tumours and other degenerations, of which the downward course seems to be accelerated by the use of the waters; (3) organic disease of brain and cord, tuberculosis, and well-marked degenerations of bloodvessels, heart, or kidneys.

Dr. Kraus has given us a useful manual containing a great amount of information. Its chief defect is the tendency to indulge in vague generalities regarding the remarkable therapeutic virtues of the Carlsbad waters. The literature of health resorts is largely vitiated by this tendency to roseate hyperbole. No one now questions the merits of the principal European spas, and undoubtedly Carlsbad stands in the very front rank of these, but the judicious reader is repelled rather than attracted by very strong statements, unsupported by adequate clinical evidence. We believe that climatic and balneological treatment is destined to an ever-increasing popularity and usefulness, and hence we would urge all writers on these questions to preserve a becoming sobriety of statement and to shun rhetorical exaggerations. With these reserves we can heartily recommend this volume to our readers.

OUR LIBRARY TABLE.

The Johns Hopkins Hospital Reports. No. 2, Vol. II.—This part contains three papers: (1) Tubercular Peritonitis, by William Osler, M.D.; (2) A Case of Raynaud's Disease, by H. M. Thomas, M.D.; (3) Acute Nephritis in Typhoid Fever, by William Osler, M.D. The case of Raynaud's disease was characterised by attacks of local asphyxia of the ears, with superficial loss of substance for three winters in succession. There was local syncope of hands and feet, and epileptiform seizures, followed by hæmoglobinuria, occurred in winter. The details are interesting. Dr. Osler, in his article on Tubercular Peritonitis, points out that it is often a latent affection localised in the peritoneum, and that it may even run its course without inducing special symptoms; that there is a natural tendency to healing, as in other local tubercular processes; and lastly, that laparotomy is often a palliative, and sometimes a curative, remedy.

The Quarterly Journal of Microscopical Science. Edited by Messrs. RAY LANKESTER, KLEIN, ADAM SEDGWICK, and MILNES-MARSHALL. New Series, Vol. XXXII., Part 3. London: A. & J. Churchill. 1891.—This part is devoted to details of comparative anatomy, and includes articles by (1) W. F. R. Weldon, on the Renal Organs of Certain Decapod Crustacea; (2) Blaxland Blenham, on the Nephridium of the Earth-worm and its Blood-supply; (3) A. Gibbs Bourne, on the Naidiform Oligochæta; (4) a paper by the same author on Pelomyxa Viridis and on the Vesicular Nature of Protoplasm; (5) by Sydney J. Hickson, on the Medusæ of Millepora Murrayi and the Gonophores of Allopora and Distichopora; and (6) Charles Slater, on a Red Pigment-forming Organism.

Ophthalmia at Hanwell.—Dr. Sydney Stephenson has just issued his report on the Central London District School at Hanwell, in which it will be remembered that two or three years ago a serious outbreak of purulent ophthalmia occurred, showing the work of the last twelve months. In May last year it appears the ophthalmic patients were moved from their old quarters into the new "isolation school." One hundred and eight children have been admitted into this building, and it is noticeable that sixty-five, or more than half of the total admissions, have come from the old school and school infirmary, which, as Dr. Stephenson remarks, must be regarded as a manufactory of ophthalmic cases, and no improvement in the number and severity of the cases can be anticipated until the structural alterations now in progress are completed. Some of these cases were admitted in consequence of a mild granular condition becoming worse; others have been cases of ulcer of the cornea, hordeolum, and accidental conjunctivitis; and a few were recurrences. He states that the cases of relapse, though rather numerous in regard to their frequency at the Lambeth school, which are, or were, under his charge, have been comparatively mild, and have afforded evidence of the benefit to be derived from the establishment of such isolation buildings.

Johns Hopkins University, Baltimore: Studies from the Biological Laboratory. Editor: H. NEWELL MARTIN; Associate Editor: W. K. BROOKS. Vol. I., part 1. 1891.—This number is entirely devoted to an account by T. H. Morgan of the Embryology and Phylogeny of the curious group of Arthropods named Pycnogonida, or Sea Spiders, which are now generally believed to occupy an intermediate and independent position between the Crustacea and the Arachnida, and, though comparatively few in number, to be of equal value with these groups. Mr. Morgan has been led from his inquiries into their development to regard them as proceeding at a remote period from the general phylum of the arachnids. The Metamorphosis of Tanystylum is very

completely given, and a long section is devoted to an account of the Structure and Development of the Eyes of Pycnogonida. The paper is accompanied by eight illustrated plates, and is certainly a valuable contribution to a difficult bit of comparative anatomy.

British Journal of Dermatology. London: H. K. Lewis. 1890.—This journal has recently been placed on a wider basis than hitherto, and is now under the direction of H. G. Brooke, H. Radcliffe Crocker, T. Colcott Fox, Malcolm Morris, J. F. Payne, and J. J. Pringle (acting editor) Further, the names of the following gentlemen are placed on the title-page as promising coöperation: Jonathan Hutchinson, Robert Liveing, McCall Anderson (Glasgow), Allan Jamieson (Edinburgh), and Walter G. Smith (Dublin). Under such auspices the journal ought to obtain even greater success in the future than it has done in the past. The present number for June contains an article by Dr. Radcliffe Crocker on Tylosis Palmæ et Plantæ, illustrated by an excellent chromo-lithograph; an article by Dr. Unna on the employment of Tuberculin in Lupus; Clinical Notes by Dr. Payne on the Contagiousness of Common Warts; and Hypertrophy of Penis and Scrotum (illustrated), by Dr. Walter Smith. Abstracts and therapeutic notes complete an excellent number, which augurs well for the new departure of the journal.

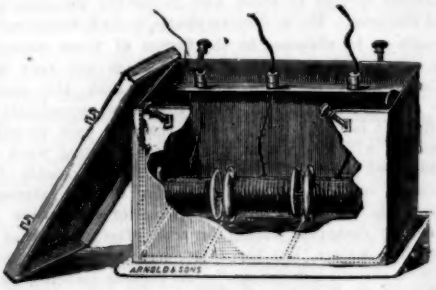
A Dermatological Bibliography. [By GEORGE THOMAS JACKSON, M.D., New York.—This is a work of ninety large octavo pages, divided into two parts, the first part being devoted to Syphilis, the second to the Skin. It speaks well for the industry of the author, and will be highly valued by all those who make a special study of the subject on which it treats. It is of course not free from errors, both of omission and commission, but does not contain more than must necessarily be found in the first edition of such a work. This is the more creditable, for, although Americans are great collectors of books, they have not the same advantages as residents in Europe.

My Doctors. By A PATIENT, with a frontispiece by G. DU MAURIER. London: Skeffington and Son. 1891.—This is a very genial and innocent piece of chaff directed against the medical profession. The types falling under notice—the Big-wig of Harley-street, the Specialist, the Country Doctor, &c.—afford the author an opportunity of telling many satirical anecdotes, and they will be recognised purely as types and not as portraits. Many of the stories will be welcomed as old friends, but they are none the less amusing, and the general tone of the booklet is extremely kindly. The description of the consultation with the Big-wig and Mr. Du Maurier's picture of the patient during the torture are very entertaining. As amusing nonsense this book may well be taken on a railway journey, or it might even be placed on the waiting-room table of those practitioners who are not afraid of having attention directed to their little foibles.

New Invention.

IMPROVED CATGUT LIGATURE-HOLDER.

MOST surgeons must have been struck by the many faults of the ordinary catgut and reels holder used in our hospitals. About a year ago one was ordered for the Newcastle-on-Tyne Workhouse Infirmary. It was supplied by a good London firm; but it had all the usual defects, and was found to be almost useless, for the dust could not be kept out of it, the reels were only half immersed, and even then the oil ran over the sides on the holder being carried about, or even moved from one table to another. When one reel revolved the others "followed suit," and the ends of the ligatures were often lost. Necessity is said to be the mother of invention. At any rate, in this case it has been the means of my having made the following modification of the old style holder, in which I have endeavoured to correct the above-mentioned defects, and to make it suitable alike for hospital and private use. Briefly the holder consists of two parts: A deep nickel-plated box with an oil-tight lid and a light fenestrated framework supporting three separated reels, which revolve on a fixed axle. This latter can be removed from the box so as to recharge the reels &c. But a study of the accompanying illus-



tration, together with the following list of "advantages claimed," will render further description unnecessary. Advantages claimed: 1. That it is equally adapted for hospital and private practice, inasmuch as the reels are easily recharged and are large enough to receive a fair length of gut in three sizes. When closed the holder is quite oil-tight, and can therefore be carried about at pleasure. 2. Asepsis is maintained, for there is complete immersion of the reels in peppermint or carbolic oil. The holder when not in use is closed by an air-tight lid which has no perforations. 3. Separation of the reels, which also revolve on a fixed axle. Therefore, when one moves it does not interfere with the others, and thus the ends of the gut are not lost. 4. The gut is dried of all superfluous oil by passing through small cotton-wool chambers, and these also prevent the ends being lost. 5. Cleanliness. The holder being of good depth obviates the risk of the oil running over when in use, which is a very common and unpleasant defect in most holders. My thanks are due to Messrs. Arnold and Sons of West Smithfield, London, who have made the above for me, and have carried out my suggestions in a most able and satisfactory manner.

Newcastle-on-Tyne. MARCUS MARWOOD BOWLAN.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.—At the jubilee of this Association, held on July 23rd, the following members were elected on the Council for 1891–92:—President: E. B. Whitcombe, M.R.C.S. President Elect: Robert Baker, M.D. Ex-President: D. Yellowlees, LL.D., M.D., F.F.P.S.G. Treasurer: John H. Paul, M.D. Editors of Journal: D. Hack Tuke, M.D., and George H. Savage, M.D. Auditors: Ernest White, M.B., and Henry Rayner, M.D. Honorary Secretaries: For Ireland—Conolly Norman, F.R.C.S.I.; for Scotland—A. R. Urquhart, M.D.; General—Fletcher Beach, M.B. Members of Council: T. S. Clouston, M.D., F.R.C.P.; A. Campbell Clark, M.D.; J. Wiglesworth, M.D.; S. H. Agar, L.K.Q.C.P.; R. Baker, M.D.; J. B. Spence, M.D.; W. R. Nicholson, M.R.C.S.; D. Nicolson, M.D.; J. Eustace, M.D.; J. G. McDowell, M.B.; H Gardiner Hill, M.R.C.S.; B. B. Fox, M.D.; J. E. M. Finch, M.D.; C. Hetherington, M.B.; T. Outterson Wood, M.D.; F. C. Gayton, M.D.; F. H. Walmsley, M.D.; and H. T. Pringle, M.D.

THE LANCET.

LONDON: SATURDAY, JULY 25, 1891.

SIGNS are not wanting that the ice has been broken in the Council Chamber of the Royal College of Surgeons of England, and that the process of liquefaction is rapidly progressing. It is beginning to be felt that the Council lies under responsibility to its constituents, the general body of Fellows and Members, and that it will be impossible in the future to ignore them and take no heed of their wants and wishes. The party of resistance has been greatly weakened by the result of the last elections, and the reforming element has been proportionately strengthened and is becoming convinced that nothing but firmness and resolution are required to bring the Council into harmony with the Fellows and Members. At the quarterly meeting of the Council held on the 9th inst. it was resolved that a meeting of Fellows and Members should be summoned so soon as the Council have a definite statement with regard to the new University for London to put before them; at the same meeting the report from the delegates of the two Royal Colleges on the question of a new University for London was carried. That report, in substance, reaffirmed the position previously assumed, that the Royal Colleges should have the entire control of the medical curriculum and examinations for the medical degrees, and that, unless this position was accorded to them, they should take no part in the work of the University. On the 13th inst. the claims of the Royal Colleges were disallowed by Lord SELBORNE on behalf of the Committee of Her Majesty's most Honourable Privy Council. Thereupon it was considered by the promoters of the meeting of Fellows and Members that a definite case was ready for submission to them, and a special meeting of the Council of the College was called on Monday last by requisition to the President to consider the present position of the College in relation to the Albert University. At this meeting the Medical Schools were released from a compact which their delegates had entered into with the Royal Colleges to support the latter in the attitude they had assumed in reference to the constitution of the new University, and a motion was carried for a general meeting of the Fellows and Members, to be held at 2 P.M. on Thursday, the 30th inst., in the theatre of the College. At this meeting the President will give a sketch of the present position of the College, and it will, we believe, be open to the Fellows and Members to propose resolutions embodying recommendations upon the subject which will be under discussion at the meeting. The main point for consideration is, Ought the Royal Colleges to stand aloof from the new University altogether, or to accept representation upon the Council of the University? In considering this question, both the Fellows and Members are met by a difficulty partly of their own creation. Both in regard to the scheme for the reconstitution of the University of London and the present scheme for the Albert University the Colleges claimed a predominant influence over the medical curriculum and the examinations for the medical degrees. In both cases the powers of the Royal Colleges would have been greatly increased, and it was at once evident to the Fellows and Members that these powers might be wielded by the Council of the College of Surgeons without reference to the wishes either of the Fellows or Members, and such an acquisition of power by an irresponsible Council was felt to be in the highest degree objectionable. This feeling led to the proposal and adoption of a resolution at the general meeting of Fellows and Members held at the College on May 3rd, running as follows: "That no increase of the power or influence of the Council of the College over medical education and examination is desirable under present circumstances," the present circumstances being really the unreformed condition of the Council of the College. Similarly, at the annual general meeting of the Association of Fellows, held at the rooms of the Medical Society on June 25th, the following resolution was adopted:—"That the Association of Fellows of the Royal College of Surgeons of England objects to the acquisition of any new powers by the College in the matter of conferring medical degrees, unless and until the Fellows of the College shall have had an opportunity of expressing their opinion thereon."

This latter resolution, which was communicated to the Council on the 9th inst., is more dexterously worded than the first, and leaves a loophole for the expression of an opinion in favour of the College of Surgeons taking part in the formation of the new University, because it merely stipulates for the opportunity of expressing an opinion before any new powers are obtained. This opportunity is now afforded; but it must be confessed that the Fellows and Members are indebted for this opportunity not to design upon the part of the Council, but to accident. The Council has persistently pursued its policy of endeavouring, in conjunction with the College of Physicians, to obtain complete control over medical education and examination in the metropolis—first, by applying to the Privy Council for power to be given to the two Royal Colleges to grant medical degrees; secondly, by entering into the scheme for the reconstitution of the University of London; and, thirdly, after the defeat of both the preceding schemes, by claiming that the two Royal Colleges should constitute the Medical Faculty of the Albert University. This last claim has now been disallowed, and the Council can only meet the Fellows and Members with the statement that it has sedulously endeavoured to ignore and to act contrary to their wishes, but that it has not been successful, and that it only remains for it to conform to the spirit of the resolution by keeping out of the University altogether. A deadlock has been created. Can the Fellows and Members help the Council out of it? Surely it is only by the adoption of reasonable measures of reform, so as to enable the Council really to speak in the name of the Fellows and Members, and to have the advantage of the support of their great constituency in the claims that they may urge on their behalf, that success can be ensured. The Fellows and Members would then feel that all legitimate grievances would be redressed, and that any increase of power

and influence by the Council of the College would be worthily employed for the good of the profession at large. At the present moment the Council comes before the Fellows and Members with a record of failure, arising solely out of its ambitious and ill-considered efforts to acquire a wider dominion without consultation with the constituents, who are the backbone of the College and the real source of its greatness. Those who are responsible for the failures have been the leaders of the Council, who have been followed by the majority like a flock of sheep. Their reign is coming to an end, and one proof of this lies in the circumstances attending the summoning of the Fellows and Members, when the Council can only point to an unbroken series of reverses and a succession of abortive attempts to ignore the wishes of their constituents expressed over and over again at the general meetings held in the theatre of the College. Now is the time for the Fellows and Members to strengthen the hands of that section of the Council which is favourable to reform, and which is certain before many months have elapsed to gain the upper hand in the Council chamber. The meeting has been called at a very short notice, and at the same time as the meeting of the British Medical Association, but we trust that these drawbacks will not interfere with the utilisation of the opportunity for advancing the cause of constitutional reform at the College.

THE annual report of the Lunacy Commissioners is one that deals with the very saddest side of our social life; and the report just issued for the year 1890, of which we give a brief outline elsewhere, is no exception to the rule. So long as heredity is such a real and active factor for good or for evil in regard to human potentialities, and so long as man has to struggle with man for existence—and the two conditions are undying—so long will the brain as the organ of mind be liable to infirmities or defects resulting in disorders and diseases of its functions, and so long must unreason and insanity in their many terrible forms occupy an all too prominent position amongst us. And, unfortunately, the intellectual progress of which we are so apt to boast seems not to be accompanied by any diminished tendency to disturbances of that very intellect itself. On the contrary, the development of the intelligence in the way of advance upon previous capacity, whether in education, business, professional work, culture, or knowledge of any sort, and whether in individuals or in classes of whatever social rank, seems to imply and almost to necessitate the development of so many more angles at which the mind may possibly break down. We are unable to point to the reports of the Lunacy Commissioners as telling us that this is not so. In the past six years the reported lunatics, idiots, and persons of unsound mind—i.e., those under official cognisance—have increased by 7000, a number sufficiently large to enable us to leave a good margin for increase of population without deriving much consolation or reason to believe that insanity is decreasing, weight being given to all proper considerations. The actual numbers of the reported insane patients on Jan. 1st, 1891, were: males, 39,162; females, 47,633; total, 86,795. The data upon which the ratio of the insane to the population is calculated were, during the past year, disturbed to some extent by the operation of the new Lunacy Act; and as the estimate of the population of the country in 1890 seems to have overshot the mark by some 700,000, it will be safer, before speculating on the proportional number of lunatics to population, to wait for the complete return of all lunatics, which, the Commissioners say, may be expected as soon as the figures of the recent census are published by the Registrar-General.

But whatever may be the result of investigation as to the amount of insanity in the country, we are happy in being able to observe that the Commissioners report favourably of the management of asylums for the insane generally throughout the country. This is a most important point, for even if it should be that we feel ourselves to be helpless in effecting a material reduction in the number of lunatics, we can at least satisfy ourselves that everything that is reasonable and proper is done to alleviate the distressful concomitants of insanity, and to render the involuntary separation of the insane from ordinary social and domestic surroundings as little irksome as possible. The comments made by the Commissioners upon the occasion of their visits to the various asylums, and entered by them in the appendix to their report, along with much valuable statistical information, are the comments of inspectors and critics, and free, therefore, from the partiality that might not unnaturally give colour to their views if they themselves were the actual asylum managers or administrators. These inspectorial comments show that generally, and as a matter of fact, most excellent provision is made for the comfort of our lunatics. Unfavourable criticism is not avoided by the Commissioners, but it is found to apply not unfrequently to matters of detail where defective arrangements can without much difficulty be remedied when attention has been called to their existence. In other cases the criticism is offered with the view merely of emphasising the desirability or necessity for more comprehensive or costly improvements, which the local asylum authorities themselves have every desire to carry out if they can get the means to do so. The number of cases of grave irregularity or gross and wilful neglect, or ill treatment—cases that cannot fail to force themselves into notice—must nowadays appear almost trifling to those whose minds can carry them back to the treatment of the insane even a quarter of a century ago. Nevertheless, when the Lunacy Commission Vote came up a few days ago for consideration in the House of Commons, an attack, which we consider to be ill-judged and unsupported by fact, was made by Dr. TANNER upon the work done by the Commission. For one thing, he said, he wished particularly to draw attention to the large number of suicides that took place in the asylums as a ground for believing that sufficient supervision was not exercised over the patients. He alleged further that the report showed that an extraordinary number of the inmates of asylums appeared to get their ribs broken without any definite cause being distinctly proved to have brought about the result. Dr. FARQUHARSON, in challenging the charge of brutality, said the attendants in the asylums did their work extremely well, and charges of inhumanity which were sometimes made against the *employés* of the asylums had generally broken down. As regards suicides, Mr. STUART WORTLEY pointed out that there had only been eighteen suicides amongst 86,000 lunatics—a fact

that could not be regarded as indicating great defect in the administration connected with these cases. He went on to say that the Commissioners had done their work during the past year so as to deserve the confidence of the House, while their report showed that an approach to a more satisfactory and more perfect treatment of the insane was constantly being made. No doubt the accommodation for the insane is inadequate, and the sanitary condition of some asylums is defective; but the Commissioners lose no opportunity in their reports of calling attention to these defects and of urging remedial measures.

WE are constantly being reminded of the dental profession and of our relation to it. The last number of the *Journal of the British Dental Association* serves specially this purpose, and we propose to devote a few lines to the chief subjects which engage the attention of the leading members of the different associations the proceedings of which are now reported. The teeth of this generation seem not to be its *forte*. In most respects health is improved and longevity increased. But it is otherwise with the teeth. Their health does not seem to be improved, and their longevity seems decidedly to be diminished. It is rare to meet, as we have lately met, with an old man of eighty-seven with all his teeth intact. It is painfully common to meet with young people with very faulty teeth, and with young people minus not a few of these necessary adjuncts to health and comfort; among well-to-do folk of middle age, the artificial teeth, moreover, often equal in number the real ones. To cope with the ills so exceptionally affecting our teeth, a great specialty has been created by law. It is of the highest moment that this specialty should proceed on good lines, both ethical and educational. And we cheerfully recognise in the minds of its best members a great desire to proceed so. Unfortunately they are somewhat hindered by a large element in their fraternity of practitioners who have not had the benefit of a professional training, or come into close quarters with those who have. This fact is clearly brought out in the address of Mr. GEORGE HENRY, the newly elected President of the Southern Counties Branch of the British Dental Association, at the annual general meeting held in June at Hastings, in which he says: "Of the 4802 dentists in the United Kingdom, only 1126 are licentiates in dental surgery, 26 have special surgical qualifications only, and 3650 have no registrable qualifications, but were on their own declaration in *bond-fide* practice of dentistry before July, 1878." Many of these gentlemen that are on the Register in virtue of their being in practice before the Act have fully earned their place by experience and by right methods of practice; but undoubtedly there are others who show a perfect want of understanding of the ways of a profession, and who bring dentistry into discredit by the most unblushing advertisement and self-laudation. It is satisfactory that there are 800 members in the British Dental Association, which uses its best influence to uphold the art and practice of dentistry, and to denounce unprofessional practices such as, to use Mr. HENRY'S words, "the exhibition of show-cases, advertising modes of practice, patented or secret processes, and scales of professional charges." He considered that the Association includes almost two-thirds of the duly qualified dental surgeons.

It is still uncertain how far mere dental studies, as a specialty, will advance our knowledge of the deeper causes of disease of the teeth. Recent views as to the chemico-parasitic origin of caries are very suggestive, and likely to be very fruitful. But the most complete study of the micro-organisms affecting the teeth we owe to men who are members of the medical profession as well as mere dentists, and who take a broad view of the subject. The constitutional and diathetic aspects of tooth disease are very important, and are likely to be appreciated only by those whose function it is to take them into consideration. Dentists differ from all other recognised specialists in that they are not necessarily members of the medical profession. What should we think of an ophthalmic surgeon or a gynæcologist who was not fully qualified in all branches of the profession, and who did not view the eye and the uterus in their wide relations to other organs and parts? This is a defect in the position of the dentist which has many bearings, and which should be removed by all who can afford the time and money to make their medical education complete. The public and the profession must always prefer the dentist who can apply general considerations to the teeth, and can bring them into use to restrain or guide his hand in the surgery of those organs over which he has now such despotic sway. The wholesale extraction of teeth and their substitution of artificial ones is now one of the most anomalous proceedings in any art, and sadly needs the vindication of a larger and professional judgment. While, however, we point out defects in the position and curriculum of dentists as at present defined, we have cheerfully to recognise that in their Associations they are endeavouring to reduce to a minimum the objections that arise from their highly specialised education, as well as the evils incidental to there being a number of men on the Register with a tendency to use trade methods of success rather than professional ones. We wish the Associations all success.

We may be permitted one word of caution in to regard the extension of what is called the charity of dentistry. It may well be that the poor have need of much of the dental relief for which the rich are ready to pay such high prices. But there is need of caution. Some of the dental journals publish with a note of satisfaction the increasing numbers who get relief gratuitously at dental hospitals. The *New York Medical Record* of June 27th devotes an article to the use and abuse of dental charity. The abuse in the States is beginning to alarm the members of the dental profession. One very questionable remedy is being applied in one of the dental hospitals—viz., to make charges a little higher than those ordinarily made in hospitals. It is enough now to indicate the evil to put our readers and the authorities of dental hospitals on their guard. The phenomenon of the "wholesale barbarous extractions of peripatetic quacks" is a very strange one. Perhaps the strangest part of it is the willingness of the victims to submit to this mutilation simply because they can have it done for nothing!

THE interest which for a time centred in the management of the cattle traffic between this country and America has found a new focus in another but related subject—the transit of Irish cattle to Scotch and English markets. Mr.

PARKER SMITH, in his recent speech in the House of Commons, discussed this question at considerable length. He had no difficulty in showing that the suffering endured by freight animals in crossing St. George's Channel was neither illusory nor trivial, and that its discovery was not a matter of yesterday. The Society for the Prevention of Cruelty to Animals, the Royal Agricultural Society, the Highland Society, the Dublin Society, and the fleshers of Glasgow have at various times protested against the conditions under which the traffic is carried on. The injurious effects of insufficient space, imperfect ventilation, and rough treatment at the hands of drovers have long been recognised, but so far without producing any tangible result in the way of reform. If we are to accept the testimony of the fleshers, the consequences of this omission have been hardly less serious for the trade itself than cruel to the animals. According to their estimates, the depreciation of meat by bruising varies from a farthing to a halfpenny per pound—a loss which is for the greater part easily traceable to the present very defective transport arrangements. In view of such depreciation, it cannot be argued with any show of reason that the regulations imposed upon the Anglo-American trade are superfluous in the case of the shorter, but often stormy, Channel passage. In point of fact, this depreciation does not by any means represent the total damage done to the living freight. It excludes entirely the proportion of lost life, and this, if it cannot, fortunately for shippers, be reckoned, as on the Atlantic route, by the hundred-head, is nevertheless an appreciable and occasionally a somewhat bulky item. Thus it is clear that the interest of trade, as well as that of humanity, is concerned in the removal of existing abuses. It is therefore satisfactory to find that not only on this point, but also as regards the remedial measures to be adopted, the Government and Mr. PARKER SMITH are substantially agreed. These measures are, as far as they can be, essentially similar to those adopted in dealing with the case of the Anglo-American traffic. We may therefore hope that in course of time the boats employed will exhibit in their structure and fittings a more direct regard than is now apparent for the purpose they are intended to serve. Wider gangways and greater space between decks, the observance of some sensible rule as to the number of animals carried, and the exclusion, if needful, of other cargo, should go far to promote this desirable object.

The important subject of ventilation, it is satisfactory to learn, is now under the consideration of the Board of Agriculture. The same authority, with whatever local help may be available, will undertake the improvement of landing-places. Another matter of even more vital consequence is the behaviour of drovers. The suffering inflicted by many of these men Mr. CHAPLIN proposes to control by adopting a licensing system which would render each cattleman liable, on proof of brutal conduct, to prompt punishment. The proposal is a good one, but in view of the difficulty experienced by so many unskilled labourers in finding work, it is perhaps a little too strict. The same purpose would probably be served by placing these men under the direct control of the ship captains, or, while on shore, under the railway officials, for their duties, and we may add their excesses, are not limited to the stage of sea transit only. We observe that no suggestion has been made with regard to the provisioning of cattle on shipboard. It may be said that this is a matter of secondary importance when the voyage is a short one, and the general truth of the observation is apparent, as also is the practical impossibility of satisfactory feeding where cattle are closely penned. It is also sufficiently clear, however, that a period of thirty hours is more than long enough to keep an animal without any fodder except such as may be snatched from among the miry feet of restless and hungry companions. With regard to drink the difficulty is no less. The subject is closely related to that of overcrowding, of which it is, indeed, a necessary consequence, and its effective treatment must accompany that of the latter evil. It is of course easy to understand that reforms in the business of cattle transport, as in other undertakings, cannot soon, if ever, be brought to ideal perfection. The traffic with Ireland in particular, which, as Mr. PARKER SMITH reminds us, still exceeds in amount our cattle trade with the rest of the world, must not be so restricted that it will not pay. A natural dread of some such result may account for the fact that the work of reform has been so long delayed, and has now been somewhat cautiously begun. If, however, as Mr. PARKER SMITH supposes, one result of regulation would be the saving of 10s. or even £1 per head, and the suggestion may be taken along with the estimate of depreciation above mentioned, then we have in addition to the argument of humanity a solid commercial reason in favour of the proposed changes.

THE recent opening of a surgical wing at the National Hospital for the Paralysed and Epileptic in Queen-square is an event which has more than a passing interest, for it marks the recognition of the fact that surgery has attained to a distinct position in the treatment of nervous diseases. Nothing, probably, in the whole history of medicine is more striking than the wonderful progress that has been made in recent years in the knowledge of the physiology and anatomy of the nervous system. It is only about five-and-twenty years since HUGHLINGS JACKSON was engaged in making his wonderfully acute clinical and pathological observations, and in drawing deductions from them—deductions which have formed at once an introduction to and an abstract of the numberless physiological experiments which have since been carried out, and many of the results of which have already become incorporated in the ordinary medical creed. And as pathological and physiological knowledge is but the prelude to the application of such knowledge to the relief of mankind, the labours of HUGHLINGS JACKSON and CHARCOT, of FERRIER, MUNK, SCHÄFER, and others have had as their natural sequel the brilliant surgery which in this country is specially identified with the names of MACEWEN and HORSLEY. The development has been remarkable, not only in its rapidity, but in the success which has accompanied it so far, and in the hope which it raises of still greater success in the future.

We have now reached an important stage—that stage in knowledge and in manipulative skill in which our estimate of both is apt to err on the side of extrava-

gance. Our knowledge of the functions of the brain is in some respects definite enough, but we are apt to lose sight of the fact that it is still very narrow and limited. The next ten years may alter very materially our conception of its functions, and if that should prove to be the case we may be quite sure that our therapeutics, both medical and surgical, will be correspondingly modified. It may be that our present methods may have to be altered and improved, and it is not unlikely that many morbid conditions which are now beyond the reach of cure, or even of alleviation, will have become accessible to the resources of our art. Whether we shall ever be able to modify materially the morbid conditions of brain which undoubtedly underlie conditions of mental disturbance is a question on which it would be idle at present to speculate, but as already interference, and successful interference, is possible in conditions which are often associated with at least temporary psychical disturbance, the prospect in this direction is not without a glimmer of hope.

Similar advances, if not quite so striking, have been made in regard to the spinal cord, and many formerly hopeless conditions have been shown to be capable of relief by surgical and by other means which have been suggested by a more intimate knowledge of the functions of the cord, and of the conditions which underlie certain forms of paralysis. Numerous recorded cases can now be pointed at as evidence of careful diagnosis and brilliant and logical therapeutics, and in this region also, although the horizon is a more limited one, the prospect is by no means a bad one. Little can be chronicled of success in dealing with cerebellar disease; but, considering the rudimentary state of our knowledge of the functions of the organ, this is scarcely to be wondered at. Light on this obscure problem seems long in coming, but there is no need to despair on that account.

Nervous diseases have always had a peculiar fascination and interest for some. That interest and fascination were never more manifest than they are at present. With regard to the present position of neurology, not only may we congratulate ourselves on the great strides which have recently been made, but on the bright prospect of even greater advances which the future promises.

Annotations.

"Ne quid nimis."

THE ALBERT UNIVERSITY.

THE alterations suggested by Lord Selborne have been made in the revised Charter of the new University and will be submitted for the approval of the Committee of the Privy Council to-day (Friday). The Council of the Royal College of Surgeons has again declined to join the new University, and will communicate this decision to a meeting of the Fellows and Members to be held on July 30th. The Comitia of the Royal College of Physicians, in a small meeting and by the narrowest majority, has decided to reaffirm its former position, and refuses to accept the seats on the Council which are offered to it in the new Charter and deemed to be sufficient by the Lords of the Privy Council. Untaught by recent events, the College of Physicians does not yet seem to appreciate that a position which must necessarily carry great influence will not lower its dignity, even though it may not secure predominant control over the medical side of the new University. The Medical Schools have been released from their engagement with the two Royal Colleges, and have now therefore complete liberty of action. A protest against the clause in the Charter compelling students to pass their final two years of study in the London Colleges or Medical Schools has been forwarded to the Lords of the Privy Council by Mr. Lawson Tait. This question has already been dealt with by Lord Selborne in reply to Sir Charles Pearson, Q.C., and Mr. Lumley Smith, Q.C., acting on behalf of the Scotch and Irish Colleges respectively. Obviously a local Teaching University must insist on a term of residence and a course of study within its own limits and under its own control. The formation of the Albert University, following on that of the Victoria University, must stimulate those in the Midlands who are anxious for University education and prestige to place themselves in a position to claim similar privileges.

APPROPRIATION OF FINES UNDER THE MEDICAL ACT.

ACCEDING to a request contained in a resolution of the Medical Council at its recent meeting, the Home Secretary received a deputation on Friday, the 17th inst., on the subject of fines imposed in the metropolitan area for offences under the Medical Act. The deputation consisted of Sir Richard Quain, Sir Walter Foster, and Dr. Glover. By the Police Act of an earlier date all fines imposed in the Metropolitan police-courts are appropriated to recouping the Exchequer for its grant to these courts. Hence it happens that the fines and costs are not available, as the Medical Act clearly intended they should be, for defraying the expense of prosecution. Consequently prosecutions within the metropolitan area have been practically abandoned. Mr. Matthews heard fully the statement of the grievance as it exists. He thought it might be met by the Public Prosecutor undertaking prosecutions, and by those who promote prosecutions stating more fully to the magistrate the costliness of such actions. He pointed out that under Jervis's Act they have power to allow not only small but adequate costs. He saw much difficulty in any special legislation in favour of medical prosecutions as distinguished from others. He promised to consider any further illustration of the evils complained of, and held out a hope that some day the Exchequer would be relieved in London—as it is in the provinces,—of the expenses of the police-courts, when the reason for insisting on taking these fines will cease. Meantime, the most pernicious forms of irregular practice thrive. The prosecutions have been suspended, and the Exchequer receives no benefit.

FOUNDER'S DAY AT EPSOM COLLEGE.

THE festival of Founder's Day, which is to be celebrated at Epsom College on the 27th inst, brings again to the notice of the profession one of the most deserving of medical charities. The very excellent educational work which is accomplished by means of the institution would alone give it a high claim to recognition; but when it is borne in mind that that educational work is carried on in conjunction with the relief of fifty-three pensioners by means of annuities and housing accommodation, and the assistance of fifty-seven pupils by means of scholarships, it is not difficult to appreciate either how important is the charitable element in the work of the trustees, or how greatly their task is increased by its complicated character. Rather more than a year ago a scheme was suggested by which

it was hoped that the two departments of the work—relief to aged and incapacitated members of the profession and the education of children—might be so separated as to become capable of being carried on independently of one another to their mutual advantage; but we regret to understand that the hope has not been realised. Indeed, the Council, in their report for the present year refer to the matter in no sanguine manner. They say: "The suggestion made in the last annual report of raising such a sum of money as would, when capitalised, secure to the fifty pensioners in perpetuity increased pensions, and enable them to remain amongst their friends, instead of having to leave all old associations to live in the asylum at Epsom, has not, the Council regret to say, met with such support from the leaders of the profession as to warrant an appeal at once to the general body of practitioners and to the public. The subject is in the hands of a committee appointed by the Council, who will gratefully receive any contributions towards the fund, to enable them to claim the generous offer made by the Editors of THE LANCET. The matter is of such moment to the pensioners, both resident and non-resident, as well as to the College, that it must, in course of time, receive the hearty support which it deserves." We are confident that when the force of the claims which this institution makes upon the sympathy of the profession is adequately felt there will be no lack of material support, and we trust that the Council and their supporters will not have long to wait for such a response to their appeal as their cause justifies them in expecting.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the Committee of the Association of Fellows of the Royal College of Surgeons was held on Friday, July 17th, at Mr. Pollock's residence in Grosvenor-street, and was well attended. The reply of the secretary of the College, Mr. Trimmer, on behalf of the Council, to the resolution passed at the annual general meeting of the Fellows Association, asking for a definite answer on the question of summoning the Fellows separately from the Members, was read and considered. In that reply it was intimated that the resolution was inaccurate in stating that an authoritative legal opinion had been given in favour of calling separate meetings of Fellows. The Committee, however, were of opinion that the statement was correct, inasmuch as their first application for separate meetings of Fellows had been met by the asseveration that it would be illegal, under the existing Charters and By-laws, for the Council to adopt this suggestion. The opinion given by the Attorney-General and Mr. Paget was to the effect that there was nothing in the Charters and By-laws to prevent the Council from summoning meetings of Fellows separately from the Members if they desired to do so. Mr. Dunn was therefore instructed to write to Mr. Trimmer and maintain the accuracy of the terms of the resolution, and at the same time to express a hope that no long time would elapse before the Council adopted the course desired by the Association. As the Council of the College has decided to call a general meeting of Fellows and Members for the 30th inst., at 2 P.M., and to report to them the present position of the College in relation to the Albert University, it will be necessary for the committee to meet again to consider the subject, and, if thought expedient, to draft resolutions to be proposed at the meeting.

THE GENERAL PRACTITIONERS' ALLIANCE.

WE give in detail in another column the resolutions agreed to unanimously at the meeting of the above Society on July 7th, under the presidency of Mr. George Brown, M.R.C.S. Eng. They refer chiefly to abuses of hospitals, and, in the main, have our entire approval. They follow the lead of the recommendations of the Birmingham Committee on this subject, including the creation of a central board to prevent and control abuse. We must wait for the report of the Committee of the House of Lords. If such a board is to be created it would be right to consider whether the Hospital Sunday Fund should not be offered the duties. The resolution respectfully urging the Lord President of the Council to consider the claims of general practitioners to a larger representation on the General Medical Council is in accordance with views we have recently expressed. The Alliance should watch its opportunity of pressing this claim on the Lord President. We venture to hope that similar resolutions will be passed by the British Medical Association.

THE BRITISH MUSEUM.

IT is surprising, and not altogether satisfactory, to learn from the return made to the Treasury by the heads of the various departments of the British Museum that that great storehouse of knowledge has during some two or three years past been suffering in an increasing measure from popular neglect, the number of visits recorded having gradually fallen off during that period. This applies particularly to the natural history collection at South Kensington, and we must confess that, having regard to the many apparent indications which contemporary literature affords of the growth of interest on the part of the public in such subjects, the recorded fact occasions us no little surprise. It may be, for all that appears, that the falling-off has occurred in the ranks of those to whom the museum is a place of amusement, and that the student element is not only to be found in greater proportion at the present moment than at any earlier period, but also in actually larger force. How this may be we do not know, for the return alluded to does not afford the means of discriminating at all between the one class of visitors and the other. One circumstance indeed points in that direction—namely, the continuous increase in the number of readers. The reading-room has always been regarded by the museum authorities as a place for study, and regulations have been made for securing to it this character. But the great demand made upon its accommodation of late has led to the enforcement of these rules with increased stringency, and to the stern discouragement of such reading as savours of mere pastime. Yet, this notwithstanding, the number of readers shows a steady growth that is still maintained, and we may hope that in other departments which are and always have been more accessible than the reading-room, the record of study, if it could be extracted from the published figures, would show a similar character. The unsurpassed, possibly unequalled, facilities for study and reference which the South Kensington collection affords deserve to be recognised, not only by all who have any special interest in natural history—that recognition has been given long since,—but by all persons, whatever their proclivities, who can pretend even to an average measure of intelligence.

MENINGEAL ANGIOMATA.

IN the *Bulletin de l'Académie de Médecine* M. Péan communicates a case of Jacksonian epilepsy, in which the attacks consisted of spasmodic contractions of the left arm and the muscles of the pharynx. The patient also suffered from very severe headache, and an operation was undertaken in the hope of finding some local cause for the pain and convulsions. They were found to depend upon an angioma in the membranes communicating with the superior longitudinal sinus, and M. Péan was able to remove the whole of it without loss of blood. The author says

that he has been unable to find a record of any similar case which has been operated upon. The extra-cranial angiomata described by Nélaton and his pupils are quite different. They are visible and palpable, their only resemblance to the variety with which M. Péan had to deal being that they also communicated with the superior longitudinal sinus. In the case of intracranial angiomata the prognosis is much more grave, from the fact that such a condition would be almost certain to give rise to symptoms of cerebral disturbance; but now that the cranial cavity can be opened, and the disturbing element removed, the prognosis is shorn of much of its gravity. The conclusions which Dr. Péan draws from a study of his case are as follows:—1. That besides extra-cranial angiomata there exists a variety of angioma situated in the membranes, and communicating with the longitudinal sinus. These are entirely intra-cranial. 2. These angiomata are simple—i.e., they are composed of a loop of capillaries, dilated and tortuous. They do not present definite limits, but gradually become continuous with the neighbouring vessels. Their chief feature is that they communicate with the longitudinal sinus by means of a dilated vein. 3. In contradistinction to the extra-cranial angiomata, the intra-cranial tumours manifest themselves by symptoms of cerebral disturbance varying with the situation of the tumour. Such symptoms are especially localised pain and convulsions of the Jacksonian variety, and those symptoms, unlike similar ones which solid growths give rise to, vary with the position of the head, being augmented by flexion and by compression of the internal jugulars in the neck. 4. The prognosis is grave because of the effect which they produce on the brain, and because of the possibility of rupture and fatal hæmorrhage, as was found in one case. 5. But those tumours are amenable to operation, and may be removed without greater risk than that of an ordinary operation.

MEDICAL PRACTITIONERS' CHARGES AND UNQUALIFIED ASSISTANTS.

THE services of unqualified assistants cannot be legally charged for. This has been decided before. But a recent judgment to the same effect by Judge Bedwell at the Barnsley County Court is reported. The following is from the *Yorkshire Post* of July 17th:—"Yesterday, at the Barnsley County Court, before his Honour Judge Bedwell, an interesting case both to the medical profession and the public generally was heard. The action was brought by Dr. Ritchie, surgeon, of Hoyland Nether, who sought to recover the sum of £20 4*s.* 6*d.* for professional services rendered, from William Pepper, gentleman, of Hoyland Common, near Barnsley. Most of the visits had been made and the medicine dispensed by unqualified assistants, and on these grounds his Honour, in giving judgment, reduced the amount by £7. He remarked that he hoped the report of the case would go abroad, for medical men seemed to have lost sight of the Act of Parliament altogether. They had no right whatever to send unqualified practitioners among their patients, and they could not recover for their visits. He gave a verdict for the plaintiff for £13, with costs."

SIR THOMAS LONGMORE, C.B.

WE cannot allow Sir Thomas Longmore to retire from the post he has so worthily occupied for nearly thirty-one years without a word of farewell. No man relinquishes the occupation of a lifetime without regret, but Professor Longmore can look back upon a distinguished official career of great usefulness and associate the recollection with the feeling that he retires with the respect and best wishes of all. His last address will no doubt be read in a sympathetic spirit, and with no little interest and instruction, for it will prove historical in that it epitomises the changes and vicissitudes incidental to a growing and developing service. The changes have indeed been remarkable that have taken place in the Army Medical Service since Sir Thomas Longmore first joined it, and since he first lectured at the Army Medical School in the presence of its founder, Sydney Herbert, in October, 1860. The Professor of Military Surgery was a regimental officer in the Crimean War. He has seen the regimental system abolished and the germ of a new, separate, and independent department planted in its stead, and he has watched its growth and development. Within a quarter of a century the whole theory and art of war may be said to have been revolutionised, the organisation and arrangements for medical service in the field have been fundamentally changed, and the nature and methods of application of surgical aid to the wounded have been vastly influenced by the progress that has taken place in surgery. Sir Thomas Longmore retires with a kindly and grateful feeling as to the past, and a hopeful look-out for the future. He was endowed with excellent qualifications for the post he was selected to fill; he conscientiously laboured, and successfully, to discharge its duties; and he has had the gratification of seeing many of the results of his labours. We can only add that we trust he may have health and happiness to enjoy the future still before him.

THE NERVES OF THE CORNEA.

DR. A. C. DOGEL has examined eyes which had been taken from the body from five to seventeen hours after death. The result of these examinations, as published in a Russian ophthalmic review, was that he found the cornea provided with from sixty to eighty small nerve branches, some with and some without medulla, of which from twenty to thirty go to the posterior corneal surface, and from forty to fifty to the anterior. In these nerves a central filament and a peripheral axis cylinder substance may be distinguished. The central filament resolves itself into single nerve fibrillæ. Within the corneal parenchyma the nerves and their branches form a primary plexus. This primary plexus gives out secondary branches, called "rami perforantes," which form the sub-epithelial plexus, and this again gives rise to still finer ramifications forming an intra-epithelial plexus. The same nerve branch generally shares with its branches of the second order in the formation of all these plexuses. The nerve terminations in the epithelium are bulb-shaped, and form ganglions. An especial thickness and zigzag course distinguish those filaments which go to the stroma of the cornea. These also form a plexus. Each layer of the cornea has a separate plexus except the membrane of Descemet and the next layer, which have no nerve plexus. The author believes, in opposition to Kuehne and Waldeyer, that the nerves of the cornea have no sort of connexion with its cells and corpuscles, but are merely situated between them.

THE MARGATE DEATH-RATE.

WE have had occasion in times past to criticise, and criticise severely, the bad drainage and the doubtful water-supply of Margate. Steps have been taken to improve the one and to protect the other. These we may, perhaps, have an opportunity of describing on some future occasion. In the meanwhile we are glad to hear that Margate can now boast of an exceptionally low death-rate. At the last monthly meeting of the town council, the Chairman of the Sanitary Committee reported that the death-rate for the quarter ending June 30th amounted to only 8·86 per 1000, and that if from this were deducted the deaths of patients in the various institutions,

hospitals, &c., sent from different parts of the kingdom, the death-rate would amount to only 7·78 per 1000. For the half-year ending June 30th the death-rate was 10·91 per 1000, or, if corrected as above, 9·29 per 1000. These figures, it was thought, indicated such a low rate of mortality, and such a healthy condition of the population, that the town council determined to address a special request to the Editors of THE LANCET to record these favourable facts. We are pleased to note that during the present year not a single death from zymotic diseases has been recorded at Margate, and that no case of typhoid fever has been notified since the 1st of January. Considering the prevalence of the influenza epidemic and the high mortality in most of the other towns of the kingdom, Margate has certainly been exceptionally favoured. Margate, with its three winds out of four blowing from the sea, its absence of unwholesome industries and of abject poor, should be one of the healthiest places in existence, and it is satisfactory to record that the figures now given show this actually to be the case.

PATHOLOGICAL ANATOMY OF ACROMEGALY.

A SUMMARY of Morinesco's paper on this subject, read at the International Medical Congress, appeared lately in the *Münchener Med. Wochenschr.* He found that in the great toe all the structures were hypertrophied, even the membrana propria of the sweat and sebaceous glands, and that the external coat of the bloodvessels had undergone a notable hypertrophy. But most marked of all was the increased thickness of the nerve sheaths of the subcutaneous nerves. The nerves themselves were degenerated; the alterations in larger nerves were much slighter. In the bones there was a new formation of bony tissue and an increase in both the length and thickness of the bones. The macroglossia was found to depend upon an increase in the connective tissue and in the size of the muscle bundles. The cervical sympathetic was found sclerosed, especially the lowest ganglion. The kidneys showed a condition of cortical nephritis, the follicles of the atrophied thyroid were enlarged and cystic, the nasal mucous membrane was thickened and mammillated, and the vessels were sclerosed and in parts almost obliterated. Such appearances as those described are, the author remarks, quite characteristic and sufficient to distinguish acromegaly from other conditions.

MILITARY HOSPITALS IN ROME.

THE Roman Medical School is about to extend its clinical resources. Military surgery has not attained in Italy the development needed to make it adequate to the wants, in peace as in war, of the standing army, but now in Rome at least a step has been taken in the required direction. The hospital, already in working order on the Cœlian Hill, south-west of the Coliseum, has its 450 beds full; while at a pinch, as after the recent gunpowder explosion, or such railway casualties as occasionally befall military trains in the metropolitan network, the corridors of the hospital can be made to accommodate about fifty patients more. But this has proved insufficient, and now, on the Monte Mario, to the north-east of the city, another hospital is in contemplation, fitted up with 450 beds, with power to add fifty more on occasion, while the water-supply and other sanitary requisites will be provided for on the best and most serviceable plans. The Roman garrison yields a mean contingent of from 600 to 650 patients to the hospitals; but the establishment on the Cœlian Hill and its supplementary reserve on the Monte Mario will leave a considerable margin of accommodation over and above that number—in the event, for example, of such a temporary addition to the military strength of the city as the recent review of the army before the Emperor William occasioned. It is to be hoped that the new hospital will speedily become *un fait accompli* without requiring, like the Policlinico, the stimulus of the dreaded criticism of the *foresteri* at their participation in the International Congress of 1893. Pending the commencement and carrying forward of the building, an addition of 200 beds to those now available on the Cœlian Hill will be made in the barracks of Sant Antonio, just behind the Basilica of Santa Maria Maggiore.

CEREBRO-SPINAL MENINGITIS.

IN the *Chicago Medical Journal* Dr. Nowlin furnishes a report on a series of cases of what is described as cerebro-spinal meningitis. The symptoms in the majority of cases consisted in severe pains in the joints, coming on suddenly, sickness, delirium, high temperature, and rapid bounding pulse. Epistaxis was also occasionally present, and there was an eruption of red spots, most marked, apparently, over the knuckles. In only one case is opisthotonos mentioned as having been present, and in another case convulsions, followed by right hemiplegia, are mentioned as having occurred. Dr. Nowlin has a strong belief in the malarial origin of this disease, and it is apparently with the object of impressing this doctrine that the paper has been written. He believes that inflammation is only an accidental complication, and that a malarial poison is at the root of the disease. Such a proposition, in our present ignorance of the etiology of the disease, may have a good deal of suggestiveness, and it is certainly not an easy one to contradict. The evidence, however, which Dr. Nowlin brings forward in its support is not convincing, and seems chiefly to consist of the facts that the condition frequently occurs in malarial districts, and that quinine seems to be, possibly, a little more useful in the disease than other drugs.

CARE AND CURE OF THE BLIND IN FRANCE.

OUR neighbours across the Channel have long been honourably distinguished for the solicitude and the success with which they have undertaken the care and cure of the blind, and year by year they present to the world a progressively gratifying record of their achievements in this branch of social philanthropy. La Société d'Assistance pour les Aveugles held on Friday, July 17th, its annual meeting in Paris, and the results placed in evidence by the yearly report were such as amply to justify its promoters in renewing their appeal to the public for coöperation and encouragement. Its two principal institutions are the Clinique Ophthalmologique des Quinze-Vingts and L'École Braille, the former devoted to the rescue—complete or nearly so—of the victims to loss of sight, the latter to the training of those whose blindness is beyond remedy or relief. Since its creation in 1880 by the Société, the Clinique Ophthalmologique has had under treatment 108,798 patients, and the proportion of cures has reached the splendid figure of 95 per cent., while the expense incurred in each case has not exceeded 70 francs, or less than £3. The Société has every reason to congratulate itself on this result, due chiefly to the admirably efficient practice of such consultants as Drs. Fienzal, Trousseau, and Abadie. The École Braille, on the other hand, has in its own way an equally creditable account to give of itself. The incurably blind boys and girls whom it accommodates and trains are by its sedulous and skilful teaching rescued from the *rôle* of pariahs and mendicants which seemed their destiny, and are educated into being bread-winners, not only for themselves but in a vast proportion of cases for their parents and relatives. During their sojourn at the *ateliers* or studios of the École they succeed in discharging, by the proceeds of their industry, the expenses incurred in their maintenance, while they have also a considerable margin of earnings which go to the

savings bank for their future start in life. The Socié é has wrought these excellent results on an income of 7557 francs, increased by contributions in its aid, its expenses during the last term having been 10,470 francs, as against receipts amounting to 11,617 francs Before adopting the report the general meeting of the Société voted twelve apprentice bursaries in favour of twelve blind candidates from the provinces, where the benefits of the École are not less conspicuous than in Paris herself. It should be known that France owes her Société d'Assistance pour les Aveugles to her leading statesmen, prominent amongst whom was M. Gambetta, aided by MM. De Freycinet, Jules Ferry, Constans, and Carnot.

A NEW METHOD OF COMPRESSING THE SUBCLAVIAN ARTERY.

AT a meeting of the Philadelphia County Medical Society, held at the latter end of May, Dr. W. W. Keen read a paper on the method which he had proposed some time since for controlling the circulation in the upper extremity by elastic compression of the subclavian artery. This was effected by a pad over the subclavian, held in place by the ordinary rubber bandage of the Esmarch apparatus, the elastic bandage being carried from the chest over the back, and then alternately between the thighs and in the opposite armpit. Dr. Keen recommends the conical graduated pad as suggested by Dr. Parkes of Chicago, as far better. This pad should be used under the bandage and over the artery, and should be somewhat in the nature of a graduated compress, small enough at its apex to fit into the interval between the clavicle and the first rib, and yet thick enough and firm enough to reach well above the clavicle and the side of the neck, so as to take all the pressure off the rubber. By using this method Dr. Parkes, in October last, was enabled to carry to a successful issue an operation for the relief of an immense traumatic aneurysm of the axillary space, following a laceration of the axillary artery by a bullet from a revolver. The aneurysm was laid wide open, cleaned of all clots, and a ligature applied above and below a large tear in the artery, without the patient losing any blood.

SUPERANNUATION FOR ATTENDANTS UPON THE INSANE.

THE Lunacy Commissioners, in their annual report, make out a strong case, both on the ground of efficiency and economy, for the retention where it already exists, and the more general adoption, of some scheme of pensioning the officers of asylums for the insane. They found their argument upon the great importance of securing efficient aid for the mentally deranged who come under their jurisdiction, and they point out that a system which makes it a matter of pecuniary necessity for the members of the staff of attendants to cling to their posts even when advancing years or impaired health have rendered them unfit to discharge their duties, militates seriously against efficient service. That the remedy for this evil is to be found in superannuation rather than in increased pay they clearly opine, and their argument under this head merits very general consideration. They say: "With regard to the medical staff, it may be observed that the specialty offers no great prizes, while it demands for the satisfactory discharge of the duties and responsibilities it entails very considerable ability, great power of organisation and administration, and varied knowledge. The work of the medical superintendent of an asylum is anxious, harassing, and not unattended by personal risk. His responsibility is unceasing, and few men can venture without damage to health to extend their tenure of office beyond moderate limits. The work of the lower officials, who are much in contact with the insane, is also wearing and not free from danger, while it calls for the exercise of the qualities of intelligence, tact, and patience, which are by no means too common. No one who has spent the best years of his life in an asylum is likely after retirement to succeed in any other occupation, and if he has no pension to look forward to his outlook for the future will be a gloomy one, for experience, we think, shows that provision for old age would not often be made out of an income which at the best would be but moderate."

THE HOSPITAL SUNDAY FUND.

IT is announced that the Hospital Sunday collection for this year has already amounted to nearly £44,000, exceeding by a substantial sum the total amount collected in any previous year. Its success is therefore assured, and this success is the more gratifying because it has been secured in spite of serious and exceptional difficulties. For one thing, the untimely death of the gifted Archbishop Magee so seriously disconcerted the plans which had been formed for holding the annual meeting at the Mansion House that it was found necessary at the last moment to dispense with that function, and not only was the powerful advocacy of the Archbishop lost to the cause, but a ground of misgiving was suggested to those supporters of the movement who have been accustomed to gather around the first magistrate of the City upon these occasions. Another circumstance which militated seriously against the success of the collection taken in the various places of worship was the untoward weather and the still more untoward epidemic which prevailed throughout the metropolis on the appointed day. Against all these adverse circumstances the united efforts of the supporters of the Fund have prevailed, and we are glad to be able to add that among these efforts the advocacy of the claims of the hospitals by medical practitioners, who have this year taken occasion to bring them more especially to the notice of certain of their patients, have been conspicuously successful.

TRISMUS NEONATORUM AT ST. KILDA.

THE most remote of the group of islands off the west coast of Scotland, known as the Hebrides—viz, St. Kilda—has long been the seat of that singular and very fatal affection, trismus neonatorum. Together with Iceland, St. Kilda shares this liability to a disease that is far more common in the tropics. It may be, as Professor Hirsch says, that this disease is more frequent than tetanus in the adult in the "higher latitudes and even in the extreme polar regions," but it would seem that it is only in these two island groups that it has occurred in such latitudes to any serious degree, sometimes effecting most severe ravages. In spite of the marked amelioration in the comfort and social condition of its population of late years, the disease has been vastly on the increase in St. Kilda, and the inhabitants have become so alarmed at the mortality that they have dispatched Mr. Fiddes, the Free Church missionary, to Glasgow to confer with leading medical authorities upon the subject. The affection, which generally shows itself within a week after birth with tetanic symptoms, invariably terminates fatally within twenty-four hours, and it is reported that it has become so general that "one family has lost twelve children, while almost all the others on the island have lost from two to eight each." (*Glasgow Herald*, July 20th). The etiology of the affection seems shrouded in obscurity. From time to time various hypotheses have been urged, and the comparatively recent proofs of the infective nature of tetanus may possibly afford some clue to it. But that poverty, or exposure, or simple insanitary surroundings can suffice is hardly likely in view

of the fact that the endemic has increased whilst the material prosperity and education of the people have *pari passu* advanced. Nor are such explanations consistent with the fact noted by Hirsch, that whereas trismus neonatorum is very prevalent in Iceland, it is unknown in the Faroe islands. There must be some factors in its production which are as yet unknown, and we cannot conceive of a more appropriate matter for a Government scientific inquiry, which might lead to the discovery of the true nature of the affection, and the adoption of measures appropriate to its prevention.

THE MATTHEWS DUNCAN MEMORIAL.

IT will be seen from our advertising columns that the movement in connexion with this memorial, under which it is proposed that a gold medal or other prize for proficiency in obstetrics and gynæcology should be founded at St. Bartholomew's Hospital to perpetuate the memory of Dr. Matthews Duncan, and that it should be named the "Matthews Duncan Medal (or Prize)," is making satisfactory progress. Subscriptions will be received by the secretaries, W. Bruce Clarke, F.R.C.S., 46, Harley-street, W., and W. S. A. Griffith, M.D., 114, Harley-street, W.

COLOUR-BLINDNESS.

A RAILWAY engine driver, forty years of age, was dismissed from his situation because he was unable to correctly distinguish colours. Dr. M. Reich, who examined the man, and who afterwards published the results of his examinations in a Russian paper, found sight, focus, and sensation of light normal, and discovered no disease by the ophthalmoscope, yet the patient could distinguish no colours when of a dark shade, and only yellow and blue when of a light shade. With the help of a red glass he could distinguish the figures on Tables II., III., VII., and VIII. (Stilling). The patient assured Dr. Reich that he had been able to distinguish colours correctly and with confidence up to the summer of 1889. He said that through over-exertion and insufficiency of sleep he had then suffered from violent headache for two weeks, and that afterwards he saw everything as if it were red. The latter symptom had continued for three months, after which time he had lost all sensation of colour. In the beginning of May, 1890, he presented himself again, declaring that he had perfectly regained the power to distinguish colours. A thorough examination completely confirmed the assurance given by the patient, who was consequently again fit for service. Dr. Reich believes that "erythropsy" is due to central mischief. The case seems to show that sensation of colour is perfectly independent of the physiological function.

TUBERCULAR NEURITIS.

IN the *Allgemeine Wiener Medicinische Zeitung*, No. 25, 1891, Professor Nothnagel records an interesting case of a young man, aged twenty-two, who complained of severe pain in both legs, especially over the anterior surface. He had for some time noticed occasional pains across the chest, and these were followed by cough and accumulation of phlegm in the throat. There was fever, the temperature rising to 103°, and the pulse to 140 per minute. The calves of the legs were much wasted, and the thighs also; the legs were drawn up at almost right angles to the thighs, and the left foot was in the same position as is found when there is paralysis of the peronei muscles, and was also somewhat swollen. The patient was unable to straighten this leg. Owing to the resistance of the flexor tendons, and the great pain produced by the attempt, neither knee-joint could be moved; but there were no signs of exudation in the joints, or roughness of the articular surfaces. The hip-joints could be moved without difficulty. There was no apparent disease then of the joints themselves. The legs were extremely tender on pressure, but it was easy to prove that the tenderness did not lie in the skin, as this could be raised without causing pain. It was considered that the diagnosis lay between an infectious disease—such as typhoid fever, with muscular pains—or myositis. As, however, the patient complained of pain in the chest, an examination was made of that part, and tubercular infiltration of the apices of both lungs was discovered. The sputum was scanty, tenacious, muco-purulent, and was found to contain numerous tubercle bacilli. The fever was irregular and intermittent. This seemed to exclude typhoid fever. After some time paresis of the vocal cords was noticed. Professor Nothnagel, therefore, was of opinion that all the patient's symptoms could be assigned to one cause, and considered that the pains in the lower extremities were due to a tubercular neuritis. Not uncommonly in the course of acute infectious diseases, various affections of the nervous system appear; anæsthesia, neuralgia, paraplegia, hemiplegia, but most commonly paralysis of certain nerve tracts. These disorders have especially been noticed after typhoid fever. Sensory disturbances are also known to occur after typhoid fever, small-pox, diphtheria, influenza, &c. These disorders may take the form of anæsthesia or neuralgia, and at the same time the motor nerves may be affected. According to Virchow and Neisser similar neuroses make their appearance in chronic infectious diseases, most commonly in leprosy and in syphilis; and within the last few years similar nervous disturbances have been recorded in tubercular subjects. In addition, similar symptoms have been recorded in cases of lead and arsenic poisoning, and especially in alcoholic patients. The treatment can be only symptomatic. The pain is best relieved by warm fomentations, on which may be sprinkled a few drops of laudanum. Massage is not to be recommended.

THE STATE OF THE THAMES.

AN urgent protest has been sent to the London County Council by the Woolwich Local Board on the condition of the Thames, which is reported to be worse than ever. The Council is at the present time in a difficult position; it inherited from the Metropolitan Board of Works a system of treating the sewage chemically and of carrying the sludge out to sea. A large sum of money had already been expended on the necessary works, but these were still incomplete, and, until a fair trial has been given to this method, it is practically impossible for the Council to embark on the still larger expenditure which may be required. At the present time the Barking works (for the sewage of the north side of the Thames) are in working order, but at Crossness (for the sewage on the south of the river) they are still in course of construction. In the meantime, a great deal of untreated sewage is discharged into the Thames, and it is likely enough that the Woolwich Local Board has some grounds for its complaint.

HOMONYMOUS HEMIANOPSIA.

IN the *New York Medical Record* Dr. Preston records two cases in which this condition was present. In one patient, a man aged forty-seven, some disturbance of vision came on after headache, lasting a few days. There was no paralysis and no evidence of tumour, but there was complete right homonymous hemianopsia. The patient is still under observation. The second case is that of a man aged fifty-one. He had suffered from headache, chiefly frontal, with occasional attacks of vertigo. There was also a history of occasional vomiting and attacks of head retraction, but no such attacks were seen during the time he remained under

observation. There was no paralysis and no change in the reflexes. There was an area of slight tenderness to percussion to the left of the occipital protuberance. There was optic neuritis in both eyes, and a condition of complete right homonymous hemianopsia was present. The diagnosis of tumour of the left cuneus was made. Increasing doses of iodide of potassium failed to give any relief, and operation was advised, but the patient unfortunately died suddenly. At the necropsy there was found a tumour involving the whole of the left cuneus, encroaching also upon the precuneus and possibly the angular gyrus, but about the last convolution it was difficult to be quite certain, as the whole of the occipital region was so much distorted.

FOREIGN UNIVERSITY INTELLIGENCE.

Caen.—Dr. Guillet has been promoted to the chair of Surgical Pathology.

Munich.—The chair of Botany has been offered to one of the pupils of the late Professor Nägeli—viz., Professor Göbel of Marburg.

St. Petersburg (Medico-Chirurgical Academy).—Professor Albitski of Tomsk has been appointed to the chair of General Pathology.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Professor Martin of Munich.—Dr. Luis Maria Rodiguez of Colombia.—Dr. T. Zagiel, formerly body physician to Sultan Abdul Aziz.

IT is stated in a Reuter's telegram, dated Cairo, July 22nd, that the projected sanitary works in Egypt have formed the subject of some discussion at an international Commission, composed of three members, on which Great Britain, France, and Egypt were represented. This Commission was to consider the plans submitted, and its deliberations were to be decided by a majority of votes, and not by unanimity of opinion. The French Government, however, seeing that under this arrangement there was a probability that their representative would always be out-voted, declined to agree to the proposal, and the question was left in suspense.

THE Council of Queen's College, Birmingham, presented Sir James Sawyer, on the 16th inst., with an illuminated address on the occasion of his severing his connexion with that institution. The council expressed a hope that he might live to enjoy many happy and prosperous years.

A POLISH Congress of Natural Science and Medicine has just been opened at Cracow. It consists of more than a thousand members, including several distinguished scientific men from Warsaw, St. Petersburg, and Geneva.

DR. ARTHUR FOXWELL has been elected Ingleby Lecturer on Diseases of Women and Children at the Queen's College, Birmingham, for the year 1892.

DR. D. J. LEECH, F.R.C.P., has been appointed to deliver the Croonian Lectures at the Royal College of Physicians in 1892.

DR. ST. CLAIR THOMSON has passed the examination for the Swiss State Diploma in Medicine.

IN MEMORIAM.—A marble tablet has been placed in the nave of Wirksworth Church to the memory of the late William Webb, M.D. St. And., F.R.C.S. Edin., by his friend Mrs. Wright, of Albert House, Wirksworth.

REPORT OF THE LANCET
Special Sanitary Commission
ON THE
REHOUSING OF THE POOR AT HUDDERSFIELD.

THE County Council of London, in proposing to take over the tramways as the terms fixed for the various concessions expire, and in seeking, at the same time, to build common lodging-houses and artisans' dwellings, will only be following the example given by several provincial towns. We need hardly point out that the organisation of tramway services is intimately connected with the question of the housing of the poor. The most effective means of preventing overcrowding in the central districts of a large town is to provide frequent and cheap conveyances to the outlying suburbs. This, however, may not always be possible if tramways are run solely with a view to profit. The municipality of Huddersfield, with noticeable perspicuity and a laudable spirit of public enterprise, at once grasped this truth and acted accordingly. By the Huddersfield Improvement Act of 1880 and the Huddersfield Corporation Act of 1882, the Corporation obtained the authority to construct and work the tramways themselves. More than eleven miles of tramways were thus laid down, £76,480 were spent, and the last account we have seen shows that for the year 1889 the income amounted to a sum of £14,135 0*s.* 8*d*, and the expenditure, including the provision made for a sinking fund, the depreciation, and all other contingencies, amounted to £14,286 13*s.* 3*d.* Thus there was a small loss, and this fact, if we look closely into the matter, is really most satisfactory and creditable to the town. The tramways are managed, not so that they may yield a profit, but in the highest and best interests of the town at large. Now, there are slums at Huddersfield, and there is there, as elsewhere, a tendency to centralise in certain districts. Thus there is overcrowding, and exorbitant rents are charged for worthless property. Then follow the usual concomitants—namely, the moral degradation of the overcrowded, poor districts, greater drunkenness, increased prevalence of vice, much sickness, and a high death-rate.

Sanitary inspectors, sanitary reformers, philanthropists, missionaries of all sorts, argue and urge that Huddersfield is not a large town, that it is easy to reach the outskirts, where cheaper and better houses can be obtained. But Huddersfield is built on a series of hills. It is difficult to run omnibuses or tramways up and down these hills, and workmen or labourers are too tired, after their day's toil, to walk backwards and forwards to these outlying districts, where they could be lodged with so much greater facility. Therein comes the utility of making tramways a public service instead of a private enterprise. The Corporation of Huddersfield, having to watch over the welfare of the town, and not merely of the tramways, at once laid down lines over these hills, and ran steam tramcars out to districts where the cost of providing conveyance could not possibly be defrayed by the few passengers likely to travel on the line. In this manner new quarters are opened up. It becomes practical to live in these districts since cheap means of communication are provided, and the municipality can afford to organise these communications even before the neighbourhoods are sufficiently peopled to make such means of transit pay their own expenses. Thus congestion in the central parts of Huddersfield has been in a great measure checked. Nor is this the only advantage. While London has been in the throes of a dispute which has personally affected and disturbed a large proportion of the inhabitants of the great metropolis—we allude to the strike of the omnibus drivers and conductors,—the most perfect goodwill and harmony has not ceased to prevail in Huddersfield. While in London drivers and conductors worked thirteen, fourteen, and sometimes sixteen hours a day, the Corporation of Huddersfield, by organising three shifts in the twenty-four hours, had long ago given its tramway servants the eight hours' day. The tramways of Huddersfield run eighteen hours out of the

twenty-four, to the great convenience of the inhabitants of the town; and yet the health of the tramway servants is not injured by overwork, since none are on duty more than eight hours in the day.

The creation of these easy means of communication constitute one of the more recent efforts made by the Corporation of Huddersfield to facilitate the housing of the poor. Even before the Corporation existed the town authorities took a step which proved of such benefit that it was imitated by several other towns. In these columns we described, at length, the common lodging-houses erected by the Corporation of Glasgow. THE LANCET of Feb. 8th, Feb. 15th, and Feb. 22nd, 1890, contains full special reports on the common lodging-houses which the Corporation of Glasgow built. These were commenced in 1871, concluded in 1879, cost £91,084, and contain in all 2000 beds. The income derived from letting these beds yields sufficient to pay the interest on the capital borrowed, to put 1 per cent. aside to form a sinking fund, and then there remains 1¼ per cent. net profit, which can go towards the reduction of rates, or be used in any other manner the town authorities may judge best. While we were recording all the details of this very successful and remarkable municipal enterprise, we were informed that the initiative taken by the town of Glasgow had been forestalled by the local authorities at Huddersfield. From inquiries now made on the spot we must give to Huddersfield the credit due for being in all probability the first town in England to take the initiative in this direction. The Huddersfield Improvement Commissioners, who were in authority prior to the incorporation of the borough, availed themselves of the Labouring Classes' Lodging-house Act of 1851 to establish a common lodging-house. When, in 1868, the borough was incorporated by Royal Charter, the Corporation took over the management of this common lodging-house, and in 1878 increased its size. This enterprise is comparatively a small matter when compared to the palatial lodging-houses built at Glasgow; but it has the advantage of being the first, and therefore the most difficult, step taken in this direction. The municipal common lodging house of Huddersfield consists of an old mill which has been converted into a lodging-house. The total capital expenditure was estimated at £6492, but this year £214 have been spent in redraining the premises and in improving the light and ventilation of the basement apartments. This shows that, as is the case with most old buildings, the sanitation was far from perfect. Nevertheless, and in spite of its defects, the greater space given, the greater order and cleanliness maintained in this lodging-house, did much to improve the general standard of accommodation throughout the town. The owners of private lodging-houses, finding that they were losing their best tenants, who went in preference to the municipal lodging-house, had to introduce improvements which they would never have thought of but for this competition.

Though so much better kept, and though salaries have to be paid, which in a private common lodging-house might be avoided by the owner doing a part of the work himself, nevertheless the municipal common lodging-house yields a profit. After paying for the working expenses, providing the interest on capital, and allotting a certain sum to create a sinking fund, there remains generally a yearly balance of about £60 net profit. We have visited this lodging-house, and cannot say that it presents any remarkable feature. It was very clean, and altogether free from unpleasant odours. The cubical system of wooden partitions had been adopted, but each cubicle contained a camp bedstead instead of the bunks superimposed one over the other, and which cannot be thoroughly reached by currents of fresh air. Under these conditions the cubical system is not so objectionable from the ventilation point of view; while in respect to decency and privacy it affords many advantages. In the basement some very large and convenient kitcheners were being installed. This is very useful, as it is very important the poor occupants of a common lodging-house should have every facility for cooking their own food. By this means they are able to secure the most nourishment for the least cost. Also much of the cooking has to be done simultaneously, as a great part of the lodgers are compelled by their work, and for other reasons, to take their meals at the same time of day. The Corporation of Huddersfield has taken these considerations into account, and has therefore been to the expense of providing exceptionally large kitcheners, boilers, &c. Nevertheless, the municipal common lodging-house of Huddersfield remains a comparatively small enterprise, and is interesting chiefly because it is probably the first attempt of this sort made in England.

More important is the artisans' dwellings which the Corporation erected in 1882–3, acting under the powers conferred by the Huddersfield Waterworks and Improvement Act of 1876. Altogether, no less than 157 houses have been built, are owned, and rented out by the municipality. These are mainly small cottages, and the rents vary from 4*s.* 8*d.* to 5*s.* 6*d.* per week. The Corporation was not able to build on its own ground, but had to lease land. The working expenses of this estate, including ground rent, rates, taxes, water, repairs, &c., was set down during the last financial year at £672 15*s.* 5*d.* The rents received during the same time amounted to £1905 11*s.* 7*d.* Notwithstanding the large difference between these two figures, the enterprise does not yield any profit worth mentioning. The capital expenditure is £28,944 14*s.* 11*d.*, and when the interest on this capital is paid there remained last year a balance as net profit of only £2. At the same time, it is essential to take into consideration that the capital was employed, not merely for building the houses, but also for the street making. Then, again, the houses were built in the best possible style; no money was spared. A mere glance suffices to show the superiority of this over neighbouring and similar classes of property. On the municipal estate every house is stone built, and it has in the yard a closet of its own, also neatly built of stone. Everywhere there is good pavement, the masonry of the house walls is excellently executed, and, in a word, the estate is well built throughout. It is not necessary to go far to find other cottages let at the same rental, where there is no pavement in the yard, only one closet for two houses, and where the walls are of rough masonry, abounding in signs of damp and dilapidation. The municipal artisans' dwellings are never vacant. Eager tenants apply for every vacancy which occurs, as it is generally recognised that, for the price, the accommodation is superior to any that can be obtained elsewhere. Yet some of these municipal dwelling-houses are not what we should desire, for a few cottages have been built back-to-back, and therefore cannot have any through ventilation. Most of the tenants work in mills, and are close to their places of employment. The artisans' dwellings are not built far away, but, on the contrary, in a central part of the town; and this of course adds to the cost, though it meets better the requirements of the case.

That some such endeavour on the part of the municipality was necessary can best be proved by the appearance of the slums and rookeries still remaining in Huddersfield. In Silk-street, notably, we found some low, dirty houses resting on the bare earth. There were no cellars, and the ground floor was literally on the ground, there being not even a board on the floor. The tenants walked and stood their furniture on the bare earth. In these cottages no through draught could be established; the light inside was imperfect, bad odours prevailed, and the atmosphere was close and pungent. The windows were so small that they were of little service, and of course the character of tenants that consented to live in such places was such as to preclude all hope that they would seek to improve their surroundings. We do not believe that there is much property of this nature remaining in Huddersfield; still there is enough to show that the work of the sanitary reformers is not yet completed. Nor must this be neglected in the future because so much has been done in the past. The population of Huddersfield is rapidly increasing. It amounted to 86,502 in 1881, and the recent census shows that it is now 95,400, an increase equal to 10·3 per cent. in the ten years. Rookeries will soon be reconstituted to house this influx, if the municipality does not rule with a firm hand. This would be all the more dangerous, as Huddersfield still employs the pail system. Fortunately this, we take it, will not last for long. So far back as 1869 the Corporation acquired the waterworks undertaking of the Huddersfield Waterworks Commissioners. This vast enterprise has occasioned a capital expenditure of £855,072, brings in an income of £44,688, and, after providing for interest, sinking fund, and other charges, yields £2027 net profit. The Corporation are now building vast sewage works, where they propose to precipitate, filter, and clarify the effluent before allowing it to pass into the river. When this is completed there will be no reason for retaining the present pail system.

We should, in conclusion, mention that the Corporation of Huddersfield owns the gasworks, from which it derives a yearly net profit of more than £9000. What from the public health point of view is, however, of more importance is the fact that the markets, cattle markets, and abbatoirs belong to the municipality. Thus all that relates to the food-supply is kept under strict sanitary control; and, in protecting the public health, the public income, after all expenses are paid, is increased to the extent of nearly £8000 annually. Altogether the Corporation of Huddersfield owns as productive municipal undertakings the waterworks, the gasworks, the markets, the public slaughter-house, the tramways, the burial-grounds, artisans' dwellings, public baths, and the model common lodging-house. The capital expenditure represented by these various public services is put down at £1,359,260. The Corporation also possesses the following unproductive undertakings: the sewage construction and works, the streets improvements, the public parks, the bridges, the town hall, and other works. These latter services are valued at £443,727. Having therefore acquired possession and full control of all that most contributes to maintain the health of the population, Huddersfield should be a model town. It is undoubtedly one of the most public-spirited towns of England, and all who look to municipal intervention for the improvement of public health cannot do better than study the history of Huddersfield.

PROGRAMME OF THE FORTHCOMING INTERNATIONAL CONGRESS OF HYGIENE.

THE programme for the International Congress of Hygiene and Demography is now made public. It contains some errors, and will be subject to some modifications, and we fear many additions. Nevertheless, the programme is full enough and sufficiently elaborate for all practical purposes. It forms a bulky pamphlet of close on fifty pages, and in addition to this we are soon to have a volume of more than two hundred pages, containing such abstracts of the papers to be read at the Congress as have arrived in time for publication. Offices are now open where tickets of membership can be obtained by payment of £1 at 20, Hanover-square. In the course of the last eight days 800 tickets of membership have already been issued. It is essential for the successful management of the Congress that those who intend to participate should at once pay their subscriptions and secure their cards of membership. Members and delegates coming from foreign countries and the colonies may be excused if they are somewhat late in their applications, but those who reside in England are not justified in delaying any longer. As it is, we conceive that it is already too late to send in papers or to propose subjects for discussion other than those now announced. Indeed, we would urge on the organisers of the Congress not to accept any other papers or new topics. The programme, in our opinion, is already overcharged, and it seems more than doubtful whether there will be time to read and discuss all the papers announced. Yet there is nothing more disappointing or more likely to give rise to unpleasant feeling than the omission of papers that have been duly announced. There need be no fear that the discussions will flag, or that the time of the Congress will not be fully and profitably taken up. It is only necessary to glance at the names already inscribed to see that there will be no lack of able and learned speakers. We trust that there will also be capable translators, as this is an International Congress. In the same way, with regard to the publications of the Transactions, it would be more useful to abbreviate the speeches so as to be able to give them in more than one language, the real purpose of an International Congress being to ascertain the opinions of the representatives of various nationalities.

The participation of India in the Congress, which we have always warmly supported, promises to constitute a notable feature of this great gathering. Several native Indian princes have subscribed £100 each towards the expenses, more than £500 having been received from India. The insufficiency of factory legislation in India will be strongly denounced by Mr. Holt S. Hallett in the Second Division of the Congress, which will meet at the School of Mines in Jermyn-street, and be devoted to Demography and Industrial Hygiene. The Bombay Millowners' Association, taking alarm, have appointed Sir Frank F. Adam, C.I.E.; Mr. Wadin, C.I.E.; and Dr. K. N. Bahadhurji, as their delegates, and have armed them with briefs in their defence. We have also been informed of the arrival of Sir Wm. Wedderburn as the delegate of the Poona Sarvajanik Sabha, a very influential political and social society. The Mahommedan Literary Society of Calcutta have nominated Mr. W. W. Hunter, who is so well known for his works on India, and Dr. Leitner as their delegates. Finally, the Colombo Municipality and Chamber of Commerce have followed the example of many other similar Indian public bodies, and appointed delegates to the Congress. Fifth on the list of eight subjects to be discussed on the first day in Division II. of the Congress stands the question of Indian factory legislation, and the sitting lasts only four hours. The importance of this subject is so great that we regret a whole day is not devoted to it, particularly when we consider that delegates have travelled upwards of 5000 miles to participate in the debate. It has been suggested that another, an Indian section, should be created, but it is too late to make such an alteration in the programme. Moreover, the Indian representatives urge that there is no French, or Austrian, or Australian, or Canadian section; why, therefore, an Indian section? But there will be at least one meeting outside the hours when the Congress transacts its business, at which those who are especially interested in Indian affairs will be invited to attend.

The necessity of such a meeting outside the ordinary work of the Congress makes us realise how very short the time allotted for the real business will be. Monday, August 10th, is to be devoted solely to the inaugural meeting at St. James's Hall. For this special tickets will be necessary. The seats are numbered, and everyone must be in his place before 3.15 P.M. The Prince of Wales will open the proceedings, and then complimentary speeches will be delivered by prominent foreign delegates, notably Dr. Brouardel, the dean of the Paris Faculty of Medicine, for France; Professor von Inama Sternegg, for Austria; Dr. Roth, for Saxony; Professor Corradi, for Italy; and many others whose names have not yet been announced. This will be a splendid gathering, and will do much to spread the knowledge of hygiene and cement the bonds of international friendship; but it will not touch the business of the Congress. In the evening the Congress will be entertained by the Royal College of Surgeons at Lincoln's-inn-fields at a conversazione. Still, it is only on the Tuesday that the business of the Congress commences. Then the Division of Demography and the nine sections are to sit for four hours—that is, from 10 A.M. to 2 P.M.; afterwards a limited number of members will proceed to a garden party given in honour of the Congress by Mr. and the Baroness Burdett-Coutts; while we presume nearly all the members of the Congress will later in the day proceed to the Guildhall, where they are to be entertained by the Court and Common Council of the City of London. On Wednesday, from 10 to 2, the Congress will resume work, and in the evening, at the Royal College of Physicians in Pall-mall, a conversazione will gather the members together, and here, as at the College of Surgeons, there may be an opportunity for a serious and useful interchange of ideas. Thursday morning, the 13th, will see the Congress again sitting for four hours, and then the members will dine at the Crystal Palace, where a special display of fireworks will be organised in their honour. Tickets for this entertainment will cost 10s., and include the dinner, the railway fare, and admission to the Palace. Friday is the last day for business, as Saturday is to be devoted to excursions. Thus there will be only four days of four hours each—sixteen hours in all for the transaction of all the business. If we take, for instance, Section 7 (Engineering in relation to Hygiene), we find thirty-eight papers announced. No paper can be read and discussed under less than half an hour, and what time would there be in this brief half an hour for translations? At an International Congress an average of one hour for each paper is not too much; and, considering that it always takes some time to get to work, in consequence of unavoidable formalities, explanations, &c., the sections, if they are to sit only sixteen hours in all, ought certainly not to attempt to deal with more than fifteen subjects. The General Organising Committee, in its first circular to secretaries of sections, suggested that there should be only eight official subjects proposed for

discussion in each section, but this very practical advice has not been followed.

Some ten to fifteen papers to form the basis of discussion for each section, some introducing a new subject, others treating of a different phase of the subject, and concluding with a resolution, would be, it seems to us, amply sufficient for the sixteen hours' work allotted to the Congress. Instead of this we find that, in Section 1, which is devoted to Preventive Medicine, no less than thirty-five papers are announced. Nor is this all. We are told that other speakers and other subjects are forthcoming. Supposing, however, these are refused, and supposing no one is allowed to speak except those whose names are already printed on the programme, still fifty-five speeches will have to be delivered, resolutions voted, and incidental business arranged, to say nothing of the translations, all in sixteen hours. Dividing the 960 minutes the Congress is to sit by the 55 speakers, this gives only 17 minutes to each; but from these 17 minutes must be deducted time for translations, for explanations, and for voting resolutions &c. Also, if 55 speakers are already announced, we may be certain that the number of speeches the subjects proposed could call forth will be three and four times as great. If time was not limited a good two hundred speeches could be delivered in Section 1 alone. To do justice to such a programme not sixteen, but something like forty to fifty hours are necessary. This will be evident to anyone who looks at the subjects and the names of the speakers.

On Tuesday, the 11th, the first day, after a short address by the President, Sir Joseph Fayrer, there will doubtless be a few complimentary remarks, and invitations to foreign honorary presidents to take seats at the presidential table. Then announcements, instructions, and explanations have to be read out; so that altogether half an hour, and perhaps close upon an hour, will have passed before the first subject for discussion will be brought forward. This is a paper by Surgeon-General J. M. Cuningham, C.S.I., on the Mode of preventing the Spread of Epidemic Diseases from one Country to Another, and we are especially told that this is to be followed by a discussion. Afterwards Dr. Proust of Paris reads a paper on the Measures to be taken with regard to Ships coming from Contaminated or Suspected Countries, and likely to introduce Exotic and Contagious Diseases into Europe. Dr. Proust is the representative of the French Government. His mission is to propagate French views with regard to quarantine, and more especially with respect to the interference of the navigation in the Suez Canal. At the Hague in 1885, at Vienna in 1887, at Paris in 1889, Dr. Proust fought step by step, inch by inch, against the growth and spread of English ideas with respect to the futility of quarantines. Nothing can be of more practical importance than this debate. The greatest interests are at stake, and continental Governments go to the expense of taking special measures to influence the Congress in this respect. The subject has been debated ardently, and many hours have been spent over it at the previous congresses. It can hardly be adequately dealt with in the few minutes to which Dr. Proust would be entitled if he had only his share of the sixteen hours the Congress is to last. The other papers for this day are, it is true, on kindred subjects. Inspector-General Lawson will read a paper on the Communicability of Cholera from Country to Country, and Dr. Ashburton Thompson of New South Wales one on Quarantine in Australasia, its Theory and Practice. On these three topics, which will practically resolve themselves into the utility or otherwise of a modified form of quarantine, the speakers already inscribed to defend the views of the French Government are Dr. Rochard, who was formerly Director of the Medical Services of the French Navy, and Dr. A. J. Martin, who is attached to the Sanitary Department of the French Ministry of the Interior. Dr. Stéhoulis will probably expound the views of the Turkish Government, and we have also already announced among the speakers the President of the Section, Dr. Janssens of Brussels, Dr. Felkin of Edinburgh, and Dr. Hewitt. We trust that those who are about to participate in this discussion will carefully study what has taken place at the previous congresses, especially the last three mentioned above, and that short, carefully worded resolutions will be prepared in advance. It will be very difficult indeed to conclude this great question in the one day. No subject could be more suitable for an International Congress. The interests at stake are so great, the number of speakers who will insist on being heard so numerous, and the practical results of a decision of such material importance to the commerce as well as to the health of all the principal nations of the world, that it is doubtful whether the discussion can be brought to a close at the end of the first sitting. Yet the programme for the second sitting (August 12th) is already overcharged, though all the papers relate to the same subject—namely, diphtheria. Its causes, its mode of contagion, its relation to subsoil water, the susceptibility of old and new residents, its prevalence at Minnesota, at Massachusetts, and at Havre, will be the subjects of papers to be read by Dr. Edward Seaton, Dr. Schrevens of Tournai, Dr. Hewitt of Minnesota, Dr. S. W. Abbott of Boston, U.S.A., Mr. Matthew A. Adams of Maidstone, Dr. Gibert of Havre, and Mr. C. E. Paget of Salford; and these are to be followed by communications on the same subject by Professor D'Espine of Geneva, Professor Eugène Hubert of Louvain, and Dr. Jules Bergeron of Paris.

The great temperance question will attract an equally numerous throng of speakers for the third day. Sir Dyce Duckworth and Professor Westergaard of Copenhagen will open the debate with papers on the Relation of Alcoholism to Public Health, and the Methods to be adopted for its Prevention. Eight papers on the same subject are announced as coming from the distinguished statistician, Dr. Milliet of Berne, and from Dr. Norman Kerr, M. Canderlier of Brussels, Dr. Baer of Berlin, Mr. J. J. Phillips of London, Dr. Rochard of Paris, Dr. Hewitt of Minnesota, and Dr. Isambard Owen. For the last day, Deputy Surgeon-General Bostock, C.B., and Sir Vincent Kennett Barrington, delegates from the Metropolitan Asylums Board, will communicate papers, illustrated by maps and diagrams, on the Hospital and Ambulance Organisation of the Metropolitan Asylums Board for the Removal and Isolation of Infectious Disease. The members of the Congress will have facilities afforded them to visit the hospitals, hospital ships, or ambulance stations mentioned in these papers; and the subject of the isolation of infectious disease might well take up the time of the entire sitting. But there still remain all the following topics which, as we have pointed out, there will not be time to discuss on the previous days, though the committee seem to think that some of the papers may be taken earlier in the week. Dr. Ransome of Manchester has a paper on the Need of Special Means for the Prevention of Consumption. Dr. Rochard of Paris is to speak on the same subject. Professor Finkelnburg of Bonn, whose papers at previous Congresses, notably the Hague, called forth much discussion, will read an essay on the Influence of Soil on the Spread of Tuberculous Diseases. Dr. Gibert, the able and energetic chief of the Sanitary Bureau at Havre, has a paper on the Geographical Distribution of Pulmonary Phthisis in the Town of Havre, and the Connexion between Phthisis and the Density of the Population, Alcoholism, and Poverty. Then Dr. J. Edward Squire of London reads a paper inquiring, To what extent can Legislation assist in diminishing the Prevalence of Consumption and other Tubercular Diseases? Here again, in the relation between sanitation and phthisis, is a wide enough subject for an entire day's discussion. But there is still to follow Dr. Priestley of London, on the Improved Hygienic Conditions of Maternity Hospitals; Dr. Greene Pacha of Cairo, on the Influence of the Nile on Mortality in Egypt; Surgeon-General Beatson and Dr. Hewitt, on Prevention of Disease in Growing Towns; Sir William Moore, K.C.I.E., on Prevention of Fevers in India; and Dr. Sisley, on the Prevention of the Spread of Epidemic Influenza. This last mentioned is certainly a seasonable subject, on which everyone is desirous of obtaining information. Indeed, the question of influenza might hold a more prominent place. Dr. Van Dvoremaal, of the Hague, will speak on the Preservation of Sight; Dr. Felkin of Edinburgh, on Malaria and Enteric Fever in Central Africa, and on the Possible Antagonism between Malaria and Phthisis. Dr. Patrick Manson of London has a paper on Filaria Sanguinis Hominis Diurnalis and Filaria Sanguinis Hominis Persistans, in connexion with preventive medicine. Professor Pistor of Berlin proposes a paper on Disinfection; Mr. J. Y. W. Macalister, on Public Libraries and Infection; Dr. P. Sonsino of Pisa, on the Principal Measures for Preventing the Spread of Entozoal Diseases in Man; Mr. G. Brendon Curgenven on the Dis-

infection of Scarlet Fever and other Infectious Diseases by Antiseptic Inunction; Mr. Sandwith of Cairo, on Cholera in Egypt; Dr. Lewis W. Sambon of Naples, on Measures for preventing the Spread of Infectious Diseases; and Dr. Phineas S. Abraham, on the Alleged Connexion of Vaccination with Leprosy.

Such is the programme of this one single section of the Congress, and this is the programme which it is proposed to exhaust in sixteen hours. Yet who shall say which of these papers shall be sacrificed. All have been announced in good time; all are equally entitled to be heard. It certainly does seem to us that to bring people from the uttermost parts of the world, and to spend a week in London, and then to limit their work to sixteen hours, which is equal to only two days' work at the ideal standard of eight hours a day, is a mistake likely to produce a miscarriage of a great part of the labours of the Congress. At no other congress were the meetings so short. At the Hague the sections met from 9 in the morning to 1 in the afternoon, and then the Congress sat as a whole from 3 to 5 or 6 P.M., and there were fewer subjects to discuss. At Vienna there were five sections, many meeting at 9 in the morning, and yet these sections had only twenty-two different questions to discuss. At Paris, in 1889, there were eight sections and eight papers to discuss. These were taken every afternoon, and the mornings were devoted to miscellaneous papers introduced by members. Here we have one single section attempting to do more than the eight sections of the last congress. Unfortunately, the programme before us shows that other sections have fallen into the same error. Section 2, which deals with Bacteriology, announces fifty-seven papers and twenty-six speakers, altogether eighty-three papers and speeches. With the time necessarily lost, there will not be an average of ten minutes for each. Section 3, dealing with the relations of the Diseases of Animals and those of Man, has a more reasonable arrangement, for only seventeen papers are announced; but then it meets only three times, for on August 13th it will join Section 2 to discuss tuberculosis. Section 4, dealing with Childhood and School Hygiene, promises thirty-seven papers and four speeches. Section 5, Chemistry and Physics in relation to Hygiene, has only nineteen papers announced. Section 6, Architecture in relation to Hygiene, has twenty-one papers announced. Section 7, Engineering in relation to Hygiene, has thirty-five papers, and eight more on condition that there is time, thus making a total of forty-three papers. Section 8, Naval and Military Hygiene, is the most practical, for the first two days are to be devoted to naval interests, and eight papers will be discussed, the other two days to military interests, and eight more papers will be taken. This makes sixteen papers, or an hour for each paper; and this is about the only section that may be able to fully realise its programme in the allotted time. Section 9, State Hygiene, announces thirty-five papers. Finally, the Division of Demography announces twenty-five papers. We have, then, already announced 305 papers and thirty speeches; but there are many more yet promised, which will be announced at some future date. As on one day two sections will sit together, the Congress has in all 156 hours to dispose of all this and much other business. The sections will evidently have to meet earlier, and sit much longer hours, or else abandon something like half their programme. On Saturday the whole day is given up to excursions. Perhaps an extra early morning sitting might then be held. The final meeting will not take place till Monday, at 11 o'clock. So that, if the Congress will sacrifice some of its pleasures and work longer, it might perhaps get through even the formidable programme of which we have described in detail but one-tenth part—namely, the programme of the first section.

BRITISH MEDICAL ASSOCIATION.

THE fifty-ninth annual meeting of this Association will take place next week at Bournemouth. The President is Dr. John Roberts Thomson, who delivers his inaugural address on Tuesday evening. The second general meeting takes place on Wednesday at 3 P.M., when Dr. Lauder Brunton delivers the address in Medicine; on Thursday, Professor Chiene gives the address in Surgery; and on Friday, Dr. E. C. Seaton that in Public Medicine. The sectional meetings are held every morning, most of them being accommodated in the Sanatorium building. In the Section of Medicine, presided over by Dr. Pye-Smith, discussions are arranged on the Etiology and Prevention of Phthisis, on Lupus, and on the Effects of Alcohol. In the Section of Surgery (president, Mr. J. Ward Cousins) the subjects of the Tuberculin Treatment of Abdominal Surgery and of Intra-nasal Surgery will be debated. In the Section of Obstetric Medicine and Gynæcology (president, Dr. W. J. Smyly) debates are arranged on Puerperal Eclampsia and on Uterine Polypi. In the Section of Public Medicine (president, Dr. J. Burn Russell) there will be discussions on Diphtheria, the Communicability of Tuberculous Disease from Animal to Man, and on the Disposal of the Dead. In the Section of Psychology (president, Dr. J. Maury Deas) discussions will be held on Hospitals for the Insane and the Influence of Surroundings on the Production of Insanity. In the Section of Pathology (president, Dr. W. H. Dickinson), the subjects for debate are Arrested Pulmonary Tuberculosis and Senile Changes in Bones. In the Section of Ophthalmology (Mr. N. C. Macnamara, president), a discussion will be held on Infantile Cataract. In the Section of Diseases of Children (Dr. Goodhart, president), the subjects of Infant Feeding and of the Treatment of Pleurisy and Empyema will be discussed. In the Section of Therapeutics (president, Dr. W. V. Snow) there will be a discussion on Koch's Treatment and one on Anæsthetics.

THE FORTY-FIFTH REPORT OF THE COMMISSIONERS IN LUNACY.

THE number of lunatics, idiots, and persons of unsound mind, included in the usual returns made to the Office of the Commissioners, shows that on Jan. 1st last the total insane *under official cognisance* in England and Wales was 86,795 (males 39,162, females 47,633), being an increase of 728 as compared with Jan. 1st, 1890. This total consisted of 39,162 males and 47,633 females, the preponderance of females being 8471.

The classification shows the distribution to be as follows: 8200 (4078 males and 4122 females) of the private class; 77,884 (34,538 males and 43,346 females) paupers; and 711 (546 males and 165 females) criminal lunatics. These totals show, as compared with Jan. 1st, 1890, an increase of 105 in the private patients, an increase of 627 in the paupers, and a decrease of 4 in the criminals. The total increase of the year, 728, is considerably below the average increase of most previous years; but the Commissioners go on to say that they think the large reduction of 867 in the number of insane in workhouses as compared with the previous year may be in some measure accounted for by the revision in the classification of these workhouse inmates due to the operation of the Lunacy Act, 1890. "In many instances persons suffering from mild forms of senile dementia or from slight weakness of mind associated with epilepsy, and who had previously been classed of unsound mind, were last year removed from the list." In addition to this, the extra trouble and expense involved in carrying out the provisions of the present Lunacy Act as regards the insane in workhouses are regarded as having "probably restricted to some extent the registration of new cases." The reduction here referred to has been accompanied during the year 1890 by a large augmentation of the usual annual increase of pauper admissions into asylums. In the year 1889 the increase in the asylum pauper admissions over those of 1888 was 295, whilst in 1890 the increase in these admissions over those of 1889 was 1153, an excess of 858. Until, therefore, the necessary adjustments are made, it would be premature and fallacious to regard the reduced increase of 728 for the year as indicative of any reduction in the proportion of cases of insanity as compared with the population of the country. The proportion of lunatics per 10,000 of estimated population is given as having been on Jan. 1st, 1891, 29·12, as against 29·26 on Jan. 1st, 1890; but from what has been said, it is evident that the proportion on Jan. 1st last is not, in point of fact, so favourable as it is made to appear. Besides, the recent census returns show the actual population to be less than that estimated by some three-quarters of a million, and

hence the relative proportion of lunatics to population will have to be modified in a sense unfavourable to the figures which have now for some years been returned. The Commissioners state that a complete return of *all* lunatics, as distinguished from those only who have been brought under official cognisance, may be expected as soon as the figures of the recent census are published by the Registrar-General. Such a return cannot fail to be of great interest, both socially and psychologically. The proportion of recoveries to admissions was in 1890 38·59 per cent., as against 38·81 in 1889. The percentage of deaths to the daily average number resident was 10·14 in 1890 as against 9·65 in 1889.

The Commissioners report that the management of county and borough asylums continues to be satisfactory. They support the desirability of granting superannuation allowances to asylum officials, with the view of attracting well-qualified persons to the service of the asylums, and of promoting the retirement of officials who, if paid by salary without prospect of pension, might, at the risk of inefficient service, continue to retain office when the power to discharge its duties has become impaired. "The system of moderate salaries with superannuation has had a fair trial in the past, and, we consider with satisfactory results, and we would most strongly deprecate any departure from it in the future." The Commissioners complain of the supineness of some asylum authorities in regard to making the necessary increase of accommodation to meet the ever-increasing demand for it; nor is this demand surprising when it is remembered that the average annual increase in the number of lunatics treated in the county and borough asylums during the ten years ending Jan. 1st, 1891, has been 1368. Fifteen county and borough asylums are mentioned as having inadequate accommodation for the lunatics whom they ought to house.

A noticeable reduction took place during the year in the number of suicides committed in county and borough asylums. From 18, 16, and 14 in the three previous years the number in 1890 was reduced to 9 (7 men and 2 women). This is a most excellent testimony to the value of the discretionary powers as exercised by the medical superintendents in this difficult and delicate matter of treatment and discipline. The deaths by misadventure (not suicides) in county and borough asylums numbered 23; 4 of these were suffocations during epileptic seizures (3 by the pillow in bed and 1 by regurgitation of food into the larynx); 3 general paralytics were choked by their food; and 8 patients died with broken ribs. The other deaths were from more exceptional causes, and include 2 of rupture of the bowel from external injury. The average weekly cost of maintenance was—in county asylums, 8*s.* 7¾*d.*; in borough asylums, 10*s.* 1½*d.*; in both taken together, 8*s.* 10¾*d.*

RETIREMENT OF SIR THOS. LONGMORE, C.B.,

PROFESSOR OF MILITARY SURGERY AT NETLEY.

AT the close of the course of lectures on Military Surgery at the Army Medical School on the 17th inst., Sir T. Longmore announced his resignation of the Professorship in the following terms:—

"This, gentlemen, is the last time I shall have the pleasure of meeting you or any others in this room in my capacity of lecturer. I gave the first lecture that was given in the Army Medical School in October, 1860, in the presence of its founder, Sydney Herbert, a statesman of noble aspirations and of most enlightened intellect, removed too early from his high position and wide sphere of usefulness. Now I have given my last. In quitting the Professorship of Military Surgery, which I have had the honour of holding for nearly thirty-one years, my thoughts naturally revert to things as they were when I entered upon the post, and as they are now—not as regards myself individually, for that is a matter of small moment,—but rather as regards the special branch of the public service with which we are all connected. The period when the Army Medical School was instituted will be looked back upon in the future as a period of transition in respect to the Army Medical Department. Old things were passing away, a new state of things commencing. The Army Medical Service had always been, as it is now, a most honourable and useful calling, as well as a pleasant one to those who were ready to find things pleasant anywhere. But the demands then made on medical officers were very different from what they are now. In the old days, before this school was instituted, so long as a surgeon was a man of gentlemanly bearing, prudent in general conduct, exhibiting a fair amount of tact and consideration in dealing with his superior officers and comrades, a comparatively moderate amount of professional knowledge was all that was required for a successful career in the public service. Knowledge is much or little in the intellectual part of our being by comparison with other knowledge, just as things are great or small in the material world by comparison with the dimensions of other things; and when I say that comparatively little knowledge of professional subjects was required by army surgeons in former days, I mean by comparison with the knowledge which is now required. It is not only the knowledge in subjects common both to old and modern days has advanced to a marvellous extent (in physiology, medicine, surgery, chemistry, and other sciences), but knowledge of professional subjects then almost entirely uncultivated is now essential. Hygiene was not a science then, it was only what some persons outside the medical profession still seem to consider it to be, a subject understood intuitively—a mere matter of common sense; the world of the microscope was then almost a *terra incognita;* no special attention was given to the condition of sight necessary for qualifying the officers and soldiers of the army for the right performance of their military duties; instruments of precision as aids in professional practice were, generally speaking, as little employed, and, indeed, were as little available for use, as arms of precision were in the old days in the combatant ranks. Moreover, while the range and area of knowledge of professional subjects have been greatly increased, demands for fresh kinds of knowledge, for which no occasion existed in former days, have been added to them. In old days, almost everything in military medical concerns that was not strictly surgical or medical was managed independently of the medical officers; others were responsible for the distribution and conduct of the men who were ordered to help them in their professional work, as well as for the discipline, rewards, and punishments of these assistants. The men selected to do the subordinate hospital duties, whether at home or in the field, had no set training for the service. Now the responsibility for all such matters rests on the medical officers themselves, and hence the necessity for an acquaintance on their part with such subjects as military law, service regulations, military movements, ambulance drill, and the duties belonging to the management and command of enlisted men. The education and training of the non-commissioned officers and men of the Medical Staff Corps in the various special and important functions which they have to discharge in the service of the sick and wounded of the army are now in the hands of the medical officers. It is obvious enough, then, that every one who seeks a commission as an army surgeon now-a-days must be prepared to devote great activity, in fact, his best efforts, to acquire the information and practical exercises which alone can enable him to perform duly the various duties which the position entails. It is no position for the listless, no Castle of Indolence. It is not to be forgotten, too, that as the demands on the knowledge of the medical officers has increased, the education of the officers in all other branches of the military service has been advanced in probably equal proportion. Their capacity for forming a correct judgment on the manner in which the duties of the medical officers are done has become greatly extended. All the more necessary is it for heed to be taken that no occasion is given for disparaging remarks on their part. But quite irrespective of what others may see or think, you have a sufficient stimulus to be and to do your best in looking to the good of the service at large, to the welfare of the men and patients who depend on you, and in the reflection that the honour and credit of the particular branch of the service to which you belong are more or less in the hands of each one of its members. I feel assured that all of you who are now listening to me will do all in your power, not only to maintain, but also to try and increase the reputation of the honourable and important department of the public service you are shortly about to enter. It has been my duty, and I may say it has been my endeavour, by constant study and observation, to keep myself on a level with the progress incessantly taking place, in other countries as well as in our own, in all matters concerning the interests of military surgery and the work of military surgeons. I have done so for the sake of those who could not have the same opportunities as myself for obtaining such knowledge.

I am well aware of my shortcomings in the directions to which I am alluding, and in now resigning my professorship it is a source of satisfaction to me that it will pass into the hands of a successor who, with the same sincere desire that I have had to do credit to the office, will have the advantage of the greater energy and power for work that belong to a younger period of life than mine now is. And now, with the heartiest wishes that you may all be long spared to have the enjoyment of good health and abundant happiness in your future careers, I take my leave of you as a teacher, and at the same time I retire altogether from the service in which I have so long worked, and in which, on looking back, I can gratefully say it has been my lot to meet with the utmost consideration and kindness."

GENERAL PRACTITIONERS' ALLIANCE.

A NUMEROUSLY attended meeting of the above Society (hitherto known as the General Practitioners' Union) was held at Exeter Hall, on Tuesday, July 7th. On being unanimously elected the first President of the Alliance, Mr. George Brown, M.R.C.S. Eng., took the chair, thanking the members for the honour they had conferred upon him, and explained the objects for which the Society has been formed. Discussion then took place as to the name, and it was resolved to change the name to the "General Practitioners' Alliance." The following officers were then elected:—Vice-Presidents for the ensuing year: Messrs. F. H. Alderson, M.D.; George Jackson (Plymouth); W. Inglis Mason, J.P. (Sudbury); G. B. Mead, M.D. (Newmarket); J. W. J. Oswald, M.D.; and R. R. Rentoul, M.D. (Liverpool). Members of the Council: Messrs. T. R. Atkinson; Campbell Boyd; J. B. Cook; F. H. Corbyn; Sydney Davies, M.D.; Jas. Dawson, M.D.; A. C. Dove, M.D.; G. J. Eady, M.D.; P. Rose; H. C. C. Shaw; Warwick C. Steele, M.D.; and Hugh Woods, M.D. Honorary Treasurer: James Savage, M.R.C.S., 11, Avonmore-road, W. Dr. Dove wishing to resign the honorary secretaryship, being unable to devote sufficient time to the duties, Mr. W. E. Dawson, 83, Chiswell-street, Finsbury-square, E.C., was unanimously elected to the office. A vote of thanks to the Provisional Committee for their successful exertions was carried with acclamation.

The meeting was then thrown open to all general practitioners to discuss the questions of hospital abuses and representation on the General Medical Council, and after a few prefatory remarks by the President, Dr. Alderson moved the following resolution: "That this meeting of metropolitan general medical practitioners unhesitatingly states that the benefits of hospitals and other medical charities are largely made use of by persons who are not fit subjects for charitable relief, and this meeting considers that the establishment of a Central Board to prevent the abuse and mismanagement of many of our hospitals is most desirable." This was seconded by Dr. James Dawson and carried *nem. con.*

Moved by Mr. F. H. Corbyn, seconded by Mr. H. C. C. Shaw, and carried unanimously: "That, in the opinion of this meeting, the present method of admission to the out-patient department of hospitals leads to gross abuse of medical charity, and, through risk of spreading infectious disease, is a danger to the public; and this meeting recommends that, with the exception of casualty or emergency cases, admission to the out-patient departments should only be obtainable by written recommendation from a medical man, a minister of religion, or an officer of the Charity Organisation Society, stating that the applicant is a proper subject for medical charity."

Moved by Mr. Campbell Boyd, seconded by Mr. Barkwell, and carried unanimously: "That, in the opinion of this meeting the special departments of general hospitals should be extended so as to obviate the necessity of establishing new special hospitals, and existing special hospitals should be affiliated to neighbouring general hospitals so as to afford the necessary material for the education of medical students."

Moved by Dr. Hugh Woods, seconded by Dr. Aydon Smith, and carried unanimously: "That this meeting totally disapproves of the paying and part-paying system as now adopted by many hospitals and dispensaries, as being subversive of all medical charity, and is demoralising in its results."

Moved by Mr. J. S. Edge, and seconded by Mr. J. B. Cook: "That this meeting, recognising that Poor-law infirmaries and fever hospitals are not systematically used for clinical instruction, recommends that these institutions be utilised for the education, under proper supervision, of medical students." This resolution was carried unanimously, as also one empowering the President to forward a copy of the above to the Committee of the House of Lords on Hospital Management.

Moved by Dr. Alderson, seconded by Mr. Corbyn, and supported by an eloquent speech from Dr. Robert Bentham, and carried *nem. con.*: "That this meeting considers that the general practitioners of the United Kingdom are not adequately represented on the General Medical Council, and would respectfully ask the Lord President of Her Majesty's Privy Council to consider the claims of general practitioners to increased representation in future appointments to seats on the Medical Council as crown nominees."

A vote of thanks to the President terminated a successful meeting.

JUBILEE OF THE READING PATHOLOGICAL SOCIETY.

THE members of this Society celebrated the jubilee by a very sumptuous dinner in the Town Hall on Wednesday, July 15th. A large number of non-professional guests and distinguished members of the profession from London were invited. The chair was occupied by Mr. O. Calley Maurice, the President of the Society for the current year, to whose energy and that of Dr. Phillips, the honorary secretary, the success of the celebration is mainly due. After the usual loyal and patriotic toasts, Mr. Mount, M.P. for one of the divisions of Berkshire, proposed "The Bishop and Clergy and Ministers of other Denominations," which was responded to by the Ven. Archdeacon of the county of Berks, who is also rector of the parish of Sonning. Nothing could have been more warm-hearted than the manner in which the Archdeacon spoke of the large and often quite gratuitous work done by the medical profession, specially referring to the care, efficiency, and earnestness with which the medical man in his own parish—Mr. Brooks—discharged the many and onerous duties of his position.—Sir George Russell, M.P. for the Wokingham Division of the county, mentioned that in his experience as a county court judge for twenty years he had never once had to reduce the fees of a medical man, often too small or inadequate to the duties performed. — Mr. Murdoch, M.P. for Reading, proposed, in eulogistic terms, "The Medical Profession," which was responded to by Sir Dyce Duckworth, and Mr. Henry Power; "The Success of the Reading Pathological Society" was proposed by Sir Spencer Wells, and responded to by the Chairman, who spoke in affectionate remembrance of the many members of the Society he had known, who had passed away, leaving their high example, which he desired to emulate. Sir G. Humphry and Dr. Douglas Powell responded for "The London Medical Societies," proposed by Dr. Shettle. The Mayor of Reading and Lord Edmund Fitz-Maurice responded for "The Guests," which was proposed by Mr. Walford, the senior member of the Society, and late President. Dr. Ord, in proposing "The Chairman," said that he had been his fellow student at St. Thomas's Hospital, then deservedly popular, and since not less appreciated, both by his fellow practitioners and the public, as the position he occupied that evening amply testified.

In connexion with this celebration of its jubilee the Society has issued an interesting *brochure*, entitled "A Retrospect of Fifty Years." Here are to be found the names of those enlightened members of our profession who, at a meeting held at the Royal Berkshire Hospital on July 13th, 1841, agreed to establish a society which antedated by some seven or eight years the London Pathological Society. Ever since 1824 Reading had its Medico-Chirurgical Society, which still exists, and possesses an excellent library, so that the value of coöperation for mutual benefit and instruction was early appreciated by the practitioners of that town and its vicinity. The first presidents of the Pathological Society were Dr. R. Pritchard Smith (father

of Professor Goldwin Smith) and Mr. John Bulley. On the death of the latter in 1851, Mr. George May (who with Mr. Isaac Harrinson founded the Society) succeeded to the surgical chair, and in 1853 the medical chair vacated by the retirement of Dr. Smith was filled by Dr. Charles Cowan. The other presidents have been Dr. Woodham (1868), Dr. Edward Wells (1879), Mr. Isaac Harrinson (1885), Mr. T. L. Walford (1886), Mr. G. May, M.B (1887), Dr. Shettle, (1888), and Mr. O. C. Maurice (1890). We cordially echo the closing words of this "Retrospect"—words which are applicable to medical communities in all countries, for they embody sentiments which, when put into practice, can never fail to promote that unity and concord that should invariably prevail amongst those who are bound together in one ennobling pursuit. The writer says: "In looking to the future the Society has good reason for encouragement; in the past may be read the promise of further growth and expanding usefulness. An association of seventy practitioners of medicine, one and all cherishing a lofty ideal, must exercise an influence of no small weight. If our members, though differing on theological, political, and social questions, are but united in the desire to advance the science of medicine, and to maintain a high standard of professional conduct, the Reading Pathological Society must, and will, continue to flourish *in plurimos annos!*"

THE LONDON SCHOOL OF DENTAL SURGERY.

THE Ven. Archdeacon Farrar, D.D, F.R.S., presided at a Conversazione held at the Royal Institute Galleries, Prince's Hall, Piccadilly. The guests were received by Mr. Morton Smale, the dean, and the members of the staff of the Dental Hospital of London. The dean, in his report, stated that "the summer session had been a peculiarly eventful one. With an entry of about fifty students the demands made both upon the capacity of the building and the teaching power of the institution had been such that it was found necessary to increase both. The hospital had been fortunate in securing the services of gentlemen to constitute the afternoon staff who were not only likely to add materially to the teaching power, but also to reflect credit upon the hospital. This, however, could only be a temporary measure to meet the demands made upon the school, for each year dentistry was attracting a larger number of young men as students. The members of the profession were, both professionally and socially, on an equality with all the other professions, none of which could provide a better opening for a useful and honourable means of livelihood. It might be true that charlatanism and quackery press somewhat hardly upon those who desire to practise their profession honourably, though not more so than upon kindred professions; but the position of the dentist's calling had been earned in the past by the consistent and persistent well-doing of those interested in its welfare; so must it be maintained in the future by the students and their successors. The school, ever anxious for the welfare of those entrusted to it, and looking forward to the bright future, had arranged with the committee of management that the two societies which in the past had had their headquarters at the hospital should shortly vacate their quarters in order that the whole of the hospital building should be devoted to hospital purposes, and even then it might be found necessary to take adjoining premises for school purposes, in which duly fitted up laboratories could be erected for dental microscopy, bacteriological research, and kindred subjects. In order that the teaching may be more thorough, four demonstrators have been appointed, each of whom will give theoretical and practical teaching upon operative dentistry, the gentlemen appointed being Messrs. Briault, A. Colyer, Dolamore, and J. P. Smith. Five of the students added to the prestige of the school by obtaining the double qualification of M.R.C.S. and L.R.C.P.—viz., Messrs. Hoffmann, Constant, Arthur Colyer, Hope, and G. Hern, the latter having succeeded in securing the three qualifications in three years and nine months, and in addition had ably filled the post of assistant and full house surgeon. The Charing-cross Hospital prize-list contained many of the names of the students of the Dental Hospital, eight first prizes and the gold medal having been won by dental students. Of this the staff were justly proud, and looked forward to even greater success in the future."

The great feature of the evening was the distribution of the following prizes by the Venerable Archdeacon Farrar:—Saunders Scholar: Mr. R. N. Gracey. Ashs' Prize (given by Messrs. Ash and Sons): Mr. E. Balding. Mechanical Dentistry.—First Prize: Mr. C. J. Allin. Second Prize: Mr. E. Balding. Metallurgy.—First Prize: Mr. T. A. Coysh; Second Prize: Mr. R. N. Gracey. Prize in Operative Dental Surgery.—First Prize: Mr. E. Gardner; Second Prize; Mr. T. A. Coysh. Dental Surgery.—First Prize: Mr. R. N. Gracey; Second Prize: Mr. A. P. Spurr. Dental Anatomy.—First Prize: Mr. R. N. Gracey; Second Prize: Mr. S. H. Hayward. Students' Society Prize: Mr. A. C. Gask.

The chairman gave an excellent address, at the conclusion of which a vote of thanks to the Venerable Archdeacon was proposed by Mr. S. J. Hutchinson, and seconded by Mr. Smith Turner, which was warmly accorded. For the delectation of the guests a pleasant programme was arranged, including an exhibition of the phonograph and a selection of part songs by the hospital musical society.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Basford Rural District.—This populous rural district, with some 52,000 inhabitants, had, according to Dr. J. S. Tew, a death-rate of 17·9 per 1000 during 1890, this being in excess of the rate for recent years. Infant death is somewhat high, and a hope is expressed that a Children's Life Insurance Bill may lead to the saving of child life. Of the infectious fevers, measles and enteric fever caused most mortality, and of allied diseases within the zymotic group diarrhœa and whooping-cough were most fatal. Notification is now in operation, and it is stated to be carried out without friction. Charts showing the relation of notified attacks to deaths are introduced in the report, and from the materials collected it would seem clear that further action is needed in the direction of getting rid of conditions such as are associated with enteric fever. Fortunately, extension of water mains and allied work are included in the account given of measures needed and adopted.

Batley Urban District—This is one of the districts where lead poisoning from water occurs, and Dr. A. Swann says that numerous cases still come under observation. Unfortunately, the midden-privy difficulty is not yet solved, but if it is to be retained in the district the principles advocated in the report should be the very least, as regards stringency, that should be entertained. The notification system revealed 202 cases of infectious disease, but the authority having the control of these diseases lack nearly every means of preventing them. They have no hospital, no ambulance, and no disinfecting apparatus. The general death-rate was 18·9 per 1000; the usually high death-rate from zymotic diseases was not quite so high as usual, it having been 2·29 for 1890.

Jarrow Urban District.—Dr. Campbell Munro takes leave of the Jarrow Town Council in his report for 1890; and he is able to say that he can find no sanitary authority in the kingdom that has done more in the eight years during which he has acted as medical officer of health than the one for Jarrow. The old inefficient isolation hospital has given place to an efficient one, nuisances have been abolished, notification has been put on a sound footing, midden privies and allied evils have been done away with, houses have been closed as unfit for habitation, &c. We may add to this that much of the progress that has taken place has been due to the sound advice given by Dr. Munro, and to the efficient services he has rendered to the district in which he has held the post of health officer.

Wem Rural District—The death-rate for 1890 was 14·1 per 1000, and it did not include a single death from an infectious fever. Some good rules were set out for observance in public schools, and the sanitary state of the district was well supervised. Mr. C. A. Corke also states that the drainage and water-supply of the district are satisfactory.

Willesden Urban District.—Dr. D. S. Skinner gives a somewhat detailed account of the general sanitary circumstances of his district, these being in such matters as sewerage and water-supply, essentially metropolitan. On the estimated population of over 61,000 the death-rate was 14·4 per 1000, an average which it has not for many years exceeded. The zymotic rate was not quite so satisfactory, and it appears that this was in part due to an increase of diphtheria, which caused nineteen deaths. This disease has shown similar tendency to increase in urban communities generally. Amongst the more important matters in which progress is recorded is the appointment of a committee to select a site for an isolation hospital, an institution of which Willesden has now long stood in need.

Guisborough Combined Sanitary Districts.—Dr. W. W. Stainthorpe deals with the several attacks of the infectious fevers in these districts (five urban and one rural) in a general table where the various circumstances are recorded, and he refers, in connexion with enteric fever, to the Tees Valley epidemic, to the importation of the disease from localities supplied with the Tees water, and to the special incidence of the disease on people within his district getting such water. The death-rates of the several districts ranged in 1890 from 8·6 per 1000 at Saltburn to 17 at Redcar. The report urges that the need for combination, in order to secure the provision of an isolation hospital, should be considered. Curiously enough, none of the authorities of this combined area have adopted regulations as to cowsheds and dairies, a matter of the first importance in connexion with the maintenance of public health. Redcar, which has the highest death-rate, has also the notoriety of having done nothing to abolish the filthy old privies with pits in the district; and yet Redcar professes, we believe, to serve as a health resort.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5690 births and 3159 deaths were registered during the week ending July 18th. The annual rate of mortality in these towns, which had declined in the preceding seven weeks from 30·9 to 16·8 per 1000, rose to 17·5 last week. The rate was 17·0 in London and 17·9 in the twenty-seven provincial towns. During the last quarter the death-rate in the twenty-eight towns averaged 26·2 per 1000, and considerably exceeded the mean rate in the corresponding periods of the ten years 1881–90. The lowest rates last week in these towns were 8·8 in Derby, 11·8 in Bolton, 12·3 in Nottingham, and 12·4 in Portsmouth; the highest were 21·3 in Oldham, 22·3 in Salford, 22·5 in Newcastle-on-Tyne, and 24·5 in Liverpool. The deaths referred to the principal zymotic diseases, which had declined in the preceding three weeks, from 338 to 310, rose again to 404 last week; they included 166 from diarrhœa, 99 from whooping-cough, 67 from measles, 36 from diphtheria, 20 from scarlet fever, 16 from "fever" (principally enteric), and not one from small-pox. No death from any of these diseases were recorded last week in Derby; in the other towns they caused the lowest rates in Brighton, Norwich, Birkenhead, Bolton, and Huddersfield, and the highest rates in Sunderland, Liverpool, Plymouth, and Preston. The greatest mortality from measles occurred in Sunderland, from scarlet fever in Preston; from whooping-cough in Preston, Portsmouth, Cardiff, and Plymouth; and from diarrhœa in Preston and Leicester. The mortality from "fever" showed no marked excess in any of the twenty-eight large towns. The 36 fatal cases of diphtheria included 25 in London, 3 in Manchester, 3 in Salford, and 2 in Liverpool. No death from small-pox was registered last week in any of the twenty-eight towns; 2 small-pox patients were under treatment in the Metropolitan Asylum Hospitals, and not one in the Highgate Small-pox Hospital, on Saturday last. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 859, against numbers declining from 891 to 857 at the end of the preceding three weeks; the patients admitted during the week were 101, against 93 and 79 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding nine weeks from 620 to 187, were 189 last week, and 9 below the corrected average. The causes of 76, or 2·4 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Sunderland, Cardiff, and in six other smaller towns; the largest proportions of uncertified deaths were recorded in Nottingham, Blackburn, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the preceding six weeks from 25·2 to 18·8 per 1000, was 18·9 during the week ending July 18th, and exceeded by 1·6 the mean rate that prevailed during the same period in the twenty-eight large English towns. The rates in the eight Scotch towns ranged from 17·1 in Edinburgh and 17·6 in Glasgow to 21·0 in Dundee and 32·0 in Greenock. The 487 deaths in these towns showed a slight increase upon the number in the preceding week, and included 22 which were referred to diarrhœa, 18 to whooping-cough, 11 to measles, 5 to "fever," 3 to scarlet fever, 3 to diphtheria, and not one to small-pox. In all, 62 deaths resulted from these principal zymotic diseases, against 46 and 44 in the preceding two weeks. These 62 deaths were equal to an annual rate of 2·4 per 1000, which slightly exceeded the mean rate from the same diseases in the twenty-eight English towns. The 22 fatal cases of diarrhœa showed a further increase upon recent weekly numbers, and included 7 in Dundee. The deaths from whooping-cough, which had declined in the preceding three weeks from 19 to 14, rose again last week to 18, of which 6 occurred in Dundee, 5 in Glasgow, and 3 in Edinburgh. The fatal cases of measles, which had declined from 27 to 12 in the previous six weeks, further fell to 11 last week, and included 9 in Glasgow. The 5 deaths referred to "fever" showed a further increase upon recent weekly numbers, and included 2 in Greenock. The 3 fatal cases of scarlet fever occurred in Glasgow, where 2 deaths from diphtheria were also recorded. The deaths referred to diseases of the respiratory organs in these towns, which had declined in the preceding four weeks, from 143 to 77, further fell last week to 73, and were slightly below the number in the corresponding week of last year. The causes of 44, or more than 9 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 21·1 and 18·8 per 1000 in the preceding two weeks, further declined to 16·4 during the week ending July 18th, a lower rate than has been recorded in any week since July, 1889. During the thirteen weeks of last quarter the death-rate in the city averaged 23·7 per 1000, the rate for the same period being 23·8 in London and 21·0 in Edinburgh. The 112 deaths in Dublin during the week under notice showed a decline of 15 from the number in the preceding week, and included 3 which were referred to whooping-cough, but not one to any other of the principal zymotic diseases. These 3 deaths were equal to an annual zymotic rate of 0·4 per 1000, the zymotic death-rate during the same period being 2·6 in London and 1·8 in Edinburgh. During last quarter the death-rate from the principal zymotic diseases did not exceed 0·9 per 1000 in Dublin, while in London it was equal to 1·9, and in Edinburgh to 2·0. The 112 deaths in Dublin last week included 11 of infants under one year of age, and 28 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a slight decline from the numbers recorded in the preceding week. No inquest cases and no deaths from violence were registered during the week, and 37, or one third, of the deaths occurred in public institutions. The causes of 11, or nearly 10 per cent., of the deaths in the city were not certified.

THE SERVICES.

Surgeon-Major R. De B. Riordan, of the Medical Staff, attains the age of fifty-five on the 26th inst., and will accordingly be placed on retired pay from that date.

ADMIRALTY.—Mr. Oliver Eaton to be Surgeon and Agent at Torr-cross and Hallsands (dated July 22nd, 1891).

VOLUNTEER CORPS.—*Artillery:* 1st Durham (Western Division, Royal Artillery): John Joseph A. V. C. Raye,

Gent., to be Acting Surgeon (dated July 18th, 1891).—*Rifle:* 2nd Volunteer Battalion, the Lincolnshire Regiment: Acting Surgeon H. J. Thornton resigns his appointment (dated July 18th, 1891).—1st (Cumberland) Volunteer Battalion, the Border Regiment: William Symington, M B, to be Acting Surgeon (dated July 18th, 1891).—2nd Volunteer Battalion, the Duke of Edinburgh's (Wiltshire Regiment): Francis Frederick Jones, Gent., to be Acting Surgeon (dated July 18th, 1891).

Correspondence.

"Audi alteram partem."

JOHN HUNTER'S HEIGHT.

To the Editors of THE LANCET.

SIRS,—As any details relating to John Hunter cannot be other than acceptable, I venture to think it will be of interest to your readers to know that I have just discovered a note by William Clift giving Hunter's exact height.

The note in question is in Clift's copy of "Hunter's Treatise on the Blood," which has just been purchased for the library of the Royal College of Surgeons. On p. 59, in a description of Hunter's illness, it is stated that "objects were also smaller than the natural recollection of them; his idea of his own size was that of only being four feet high." In the margin, opposite this Clift has written: "He was 5 ft. 2 in. in height." Again, on p. 65 the biographer states: "Mr. Hunter was of a short stature." Against this Clift has added a marginal note, "5 feet 2 inches." There is no doubt from these entries that John Hunter was a shorter man than has hitherto been supposed. The biographers, however, point to the fact of his being a short man. Sir Everard Home, in the biographical notice prefixed to the "Treatise on the Blood" speaks of Hunter as "of a short stature," and Adams describes him as "below the middle stature." In his recently published Echoes from the College of Surgeons (*Hospital Gazette*, March 7th, 1891), Mr. T. M. Stone throws some light on this subject. Speaking of the drawing of Hunter by Sir Nathaniel Holland, he says that Sir John Doratt, a former pupil of Hunter, on being asked if the picture was a good likeness, replied "Yes, ... only it gives the idea of a large man, which Hunter was *not*, he was a little man." Jesse Foot describes Hunter as being "about the middle stature," and this description is copied exactly by Drewry Ottley. No doubt it is from this latter that the general idea of Hunter's size has been taken. It must not be forgotten that Home, Adams, Doratt, and Clift all had seen Hunter, and therefore spoke from personal knowledge. The figures in the margin of the book are in Clift's well-known neat handwriting, so that there is no possiblity of mistaking them; and the fact that the note occurs twice on different pages renders it very unlikely that Clift made a mistake in his entries.

I am, Sirs, yours truly,

July 17th, 1891. JAS. B. BAILEY.

DEATHS UNDER CHLOROFORM AT THE ROYAL INFIRMARY, MANCHESTER.

To the Editors of THE LANCET.

SIRS,—As the recent deaths at the Royal Infirmary, Manchester, have caused some public comment, I am asked by the Medical Board to send you for publication the enclosed Report presented to them by a subcommittee appointed to investigate the matter.—I am, Sirs, yours faithfully,

JAS. HARDIE,

Manchester, July 16th, 1891. Chairman of the Medical Board.

Report of the Chloroform Fatalities Subcommittee.

We have to report:—

1. That of the five deaths referred to by the coroner at the recent inquest, two only were due to the direct effects of the anæsthetic, and that of the other three, two were due to vomited matter getting into the larynx and producing suffocation, and one to collapse suddenly supervening after the operation had been concluded and the patient had nearly recovered from the effects of the anæsthetic.

2. We have been informed by Mr. Alexander Wilson, the anæsthetist, that he has used the chloroform in question about 800 times, and had observed nothing unusual in the behaviour of the patients either during or after its administration.

3. We have learned, also, that the chloroform is largely used in other hospitals, and that no difference has been observed between it and others.

4. A report on the quality of the chloroform by Professor Attfield was laid before us, in which it is stated that "it possesses all the characters and responds to all the tests of pure chloroform of the British Pharmacopœia; and, in short, is perfectly pure chloroform." He also certifies that it is "of excellent quality for anæsthetic purposes."

5. Under these circumstances we are satisfied that the chloroform in question is a good and reliable article, that the deaths were not attributable to any peculiarity belonging to it, but would probably have equally occurred under the use of chloroform manufactured by any other process.

EXCISION OF RECTAL FISTULÆ.

To the Editors of THE LANCET.

SIRS,—In your last week's issue there is a description of an operation by Mr. Barling which he evidently takes to be novel, though he remarks that he expects to hear that other surgeons have anticipated him, and that possibly Hippocrates did it. I have no doubt that if he will refer to that admirable work "Neale's Digest" he will find the exact date of the short paper in which some ten years ago I described the identical method he adopted, and related, I think, two or three successful cases. Since that date I have operated on twenty-three cases, and the large majority have healed either by first intention or very rapidly. If I remember correctly the title of my paper was "The Immediate or Rapid Treatment of Rectal Fistulæ," and I pointed out some necessary steps as well as reservations which surgeons adopting this successful plan will do well to bear in mind. Mr. Barling will find in the American journals that Mr. Stephen Smith of New York, Mr. Reeves-Jackson of Chicago, and other surgeons speak very highly of my procedure, though so far as I am aware none of them mention my name as the originator of it. In fact, Dr. Leon Strauss of Louisville, Kentucky, recently told me that in America the plan is credited to some American surgeon, whose name is not familiar to me, though I fancy it is Lange. Exactly in the same way is inguinal colotomy (which I introduced for the treatment of rectal cancer and incurable stricture) credited to those who long followed me, and who have suggested and adopted certain modifications which experience has proved not to be advantageous. *Fiat justitia* seems not to be a fashionable motto among surgeons nowadays. I find that Mr. Ball, in his work on the Rectum, pages 96 and 97, speaks highly of the plan and gives the reference to newspapers.

I am, Sirs, yours truly.

Grosvenor-street, W., July 22nd, 1891. H. A. REEVES.

ALCOHOL AND LONGEVITY.

To the Editors of THE LANCET.

SIRS,—I scarcely think that any of your readers will need that I should explain, in reply to Mr. Sers, that I am not responsible for the deduction which he attempts to father on me. He might have called to mind the result of the Collective Investigation Committee of the British Medical Association. This proved with regard to alcohol that it shortens the average duration of life in proportion to the quantity taken. The latter part of his letter speaks for itself. Considering that there are some 15,000 persons insured in the temperance section and some 25,000 in the general, people of all ages and occupations, scattered all over England, it is certain that there is no condition in which the two classes differ capable of affecting their mortality, save and except the habit of taking alcoholic liquors. It is the wildest of assumptions that the members of the general section are exposed to any less favourable condition of health than the others, except by reason of the pernicious effects of alcohol. The office whose statistics I have given is not singular in its experience. The Sceptre Life Office from 1884–90 expected 679 claims in the general section, and had 527, or 77·61 per cent.; it expected 306

in the temperance section, and had 174, or 56·86 per cent. This is a younger office, and has insured chiefly members of churches, who are good lives in other respects. But there have been transfers from the temperance section in this office also—397 in the above period of seven years. But of this number, be it noted, only 7 have died, and hence it is clear that the difference between the two sections is practically unaffected. I have these figures from the officials of the office. It ought to be known, too, that every year each person insured in the temperance section has to sign a paper that he is still an abstainer; the person is transferred to the general section if he fails to sign this paper, and I am informed that many abstainers have been so transferred through their own oversight or carelessness. This is a further explanation of the number beyond those suggested in my previous letter, and shows that they are not all due to ill-health. I may add that a similar paper has to be signed in the case of the United Kingdom Provident Institution, and the same explanation applies to some of their 470 (not 490) transfers.

I am, Sirs, yours truly,

J. J. RIDGE,

Hon. Sec., British Medical Temperance Association.

Enfield, July 21st, 1891.

CASUALTY PATIENTS AT CHILDREN'S HOSPITALS.

To the Editors of THE LANCET.

SIRS,—Seeing an advertisement in THE LANCET for casualty physicians at the Hospital for Sick Children in Great Ormond-street, I consider it well to direct your attention to the great dangers which attend a system of "casualty" patients at children's hospitals, where every form of infectious disease is liable to occur and to spread. In the case of such a disease as whooping-cough it would be easy to prove that very serious harm is done by the out-patient department of a children's hospital; but when cases of measles and scarlet fever are brought by ignorant parents into overcrowded rooms, where two or three hundred infants and children are collected, it is impossible to prevent most serious consequences. It will be sufficient to draw your attention to the possibilities referred to, for the proper authorities to interfere, or at least make inquiry into this subject.

I am, Sirs, yours faithfully,

Savile-row, July 12th, 1891. ROBERT LEE.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Alleged Decrease of Population.

IT is now generally admitted that the census returns are fairly correct, and that there has been a considerable decrease in the population of the city, meaning thereby the population of the borough of Liverpool. This comprises the whole of the parish of Liverpool, with portions of the parishes of West Derby and Toxteth Park. The decrease is accounted for in many ways. Notwithstanding the fact that Liverpool has for the upper and middle classes, in its centre and elsewhere, hundreds of most excellent residences, they are gradually preferring to move to the suburbs or to the Cheshire side. The neighbouring borough of Bootle has received of late years many former residents of Liverpool; so has Walton-on-the-Hill, a northern suburb. In other words, Liverpool has diminished in its centre, but extended north, south, east, and, taking the Cheshire side as the western boundary, west also. Long before the next census is taken we may hope that the many bare spots in the city which now mark the wholesale demolition of insanitary property will be covered with model dwellings for the working classes, many of whom must reside near their work. Some approach towards this has already been done. A street which was formerly tenanted by disreputable characters has been cleared of these latter, its name has been changed, and hopes are entertained that it may be tenanted in future by respectable inhabitants of the upper labouring class, who by thrift can afford to pay a reasonable rent, and so secure good accommodation.

Conviction of a Sausage-maker: Conflicting Medical Evidence.

On May 20th a pork-butcher and sausage-maker was fined by the stipendiary magistrate 20*s.* and costs for an offence under the 114th section of the Public Health Act, 1875. This offence consisted of causing a nuisance injurious to health upon his premises. An appeal was lately heard by the Recorder, the remarkable feature of the case being the conflicting nature of the medical and other evidence. A neighbour complained of the stench as penetrating his rooms and causing him serious illness on four occasions. Mr. Austin Williams, who attended him, described the smells in the house as decidedly a nuisance and injurious to health. Dr. Whitford, who visited the house on several occasions, gave similar evidence, and stated that he experienced a difficulty in breathing. For the other side, Dr. Taylor, medical officer of health, Dr. Hope, assistant medical officer of health, and two sanitary inspectors were called, and all declared that there was no nuisance whatever, and that all the materials used were perfectly wholesome and fit for food. The learned Recorder observed that a difficult task had been set before him. It might be simply a question of opinion as to whether or not a smell existed, and some of the witnesses might, as had been suggested, become used to the smell. He dismissed the appeal and sustained the conviction, with costs.

The Lock Hospital.

The arrangements for reopening the Lock Hospital are rapidly approaching completion, and there is every reason to hope that it will be ready for the reception of patients early in August. An annual prize of two guineas is awarded by the surgeons to the student of the Medical Faculty of Liverpool University College who shows the greatest proficiency in knowledge of venereal diseases.

The Proposed New Post-office.

The purchase of a site and the proposed grant by Parliament for the building of a new post-office for Liverpool are matters of sanitary and therefore of medical interest. For many years past the *employés* of the head Post-office here have, from the postmaster to the humblest messenger, been located in a part of the old Revenue buildings. This, though very ample at the time, was not sufficient to cope with the increased demands since made upon it, and its erection on the site of the old dock has always been acknowledged as a huge mistake. For years past the Post-office officials have been so cramped for space that, in spite of repeated alterations and much expenditure, the premises have been quite unfit for their purpose, and there has been the curious anomaly of Government officials working in a building which a Government inspector would in all probability have condemned as unhealthy. Happily this will be all changed in the course of two or three years. The site is ample for a model Post-office with all the necessary departments and the most recent sanitary and other improvements. The experience of the officials in the comparatively new offices at London, Edinburgh, Glasgow, and elsewhere, will be valuable, and advantage ought to be taken of this.

Liverpool, July 20th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Death of Alderman T. P. Barkas of Newcastle.

MANY of your readers will regret to hear of the death of Alderman T. Barkas, of this city, which took place on the 13th inst. from apoplexy and paralysis after an illness of about three weeks. Alderman Barkas was in his seventy-third year, and was born and lived his whole lifetime in Newcastle. He was, indeed, a remarkable and many-sided character, and to a great extent self-educated, commencing life in his father's business of a carpenter and builder. He soon relinquished this for bookselling, by which means he was better enabled to acquire knowledge. He at the same time adopted popular lecturing on scientific subjects, not for gain, but from pure love of imparting to others what he knew. He was well up and abreast with all his subjects, which included electricity, physiology, and, indeed, the whole circle of natural science. In the years 1851 and 1852 he regularly attended the Newcastle Medical School, going through the course required by medical men as an amateur. In 1864 he devoted his attention to microscopical research, his chief object of study being Diatomaceæ,

a large variety of which he gathered, mounted, and classified. He also read and worked in almost every field of microscopical research, and at the same time he devoted much attention to marine zoology, and had some of the finest marine aquaria in the district. In 1868 he began to devote his attention to the investigation of the fauna in the Northumberland coal strata, and followed the coal measure palæontology with his usual enthusiasm. Besides searching the colliery débris himself, he engaged the men and boys of the various collieries to search for and send him specimens. The result was that he soon obtained a large collection of fossil fish and reptiles, many of which he retained, but distributed some of the best specimens to local and national museums. In 1873 Mr. Barkas published a "Manual of Coal Measure Palæontology," with an atlas, containing 247 illustrations. He was a widower, and has left three sons and a daughter. One of the former, Mr. Wm. Barkas, M.R.C.S., is in practice at Sydney, Australia.

Sunderland.

Dr. Murphy of Sunderland performed Porro's operation last week at the infirmary. The woman's pelvis had a diameter of only one inch and a half. Up to now neither mother nor child has had a single bad symptom. This, so far as I am aware, is the first time Porro's operation has been performed in the north of England, and Dr. Murphy is to be congratulated upon the success of his case.—Mr. Shapter Robinson, who is leaving Sunderland for London, was last week entertained to dinner by a large number of the practitioners of Sunderland and district. After dinner he was presented with a very handsome silver tray as a mark of esteem in which he was held while resident in Sunderland. Such events are very pleasant to note, and I am glad to say that they are becoming more frequent in the north.

Newcastle Royal Infirmary.

Dr. Baigent has been appointed chloroformist and Mr. W. Ridley surgical registrar at the infirmary. Our Northern Volunteers have been particularly unfortunate this year in their camping out and training; one was drowned at Morpeth, one killed on Newcastle Moor during some rail-blasting experiments, another had his eye injured at Newbiggin, while another had his hand so injured from an explosion at Alnwick that Mr. Page found it necessary to amputate the thumb.

Opening of the Consett (Co. Durham) Public Park.

The Consett Iron Company a short time ago purchased thirty acres of land, and presented it as a public park for the district. Not content with this generous gift, they had it properly laid out and furnished, planting some 40,000 trees and foliage plants, and erected a band stand which alone cost £500. The park was publicly opened last week amid general rejoicing. This company give employment to about 20,000 persons, and have been ever mindful of their welfare by the erection of schools, literary institutes, and by the diffusion of sanitary knowledge. A monster procession of several thousands was formed on the opening of the park, preceded by bands and banners, and it was computed that about 15,000 people visited the park on the occasion.

Newcastle-on-Tyne, July 22nd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Post-graduate Courses in Edinburgh.

IT has already been mentioned here that Edinburgh had determined to have a post-graduate course this autumn. The proof of the syllabus has now left the printer. The course begins on Monday, Sept. 21st, and closes on Saturday, Oct. 10th. The material offered appears to be large and varied. The course has been arranged in two main groups—namely, infirmary courses and special courses. The infirmary courses include medicine, surgery, gynæcology, diseases of the eye, diseases of the ear, throat, and nose, and pathology; for these a composition fee of £5 5s. is charged. Under special courses are grouped subjects taught outside the infirmary; they include a most practical series of classes, as Nervous Diseases, by Dr. Clouston; Diseases of the Chest, by Dr. Philip; Diseases of Children, by Dr. John Thomson; Operative Surgery, by Mr. Caird and Mr. Hodsdon; Bacteriology, by Dr. W. Russell and Dr. M'Fadyean; Sanitary Chemistry, by Dr. Macadam; and a number of other courses on ophthalmology, gynæcology, &c. For most, if not all, of these special courses a special fee is charged.

Medical Examinations in Edinburgh.

The second professional examination at the University finished last week, and this week examiners and junior students are engaged with the first professional.

Health of Edinburgh.

The mortality last week was 82, making the death-rate 16 per 1000. Diseases of the chest caused 20 deaths and zymotic diseases 6, of which 3 were due to whooping-cough. The intimations for the week were: Typhoid fever, 3; diphtheria, 1; scarlatina, 19; measles, 66. The number of deaths in Leith during the week was 25, making the death-rate 8·5 per 1000.

July 21st.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Board of Superintendence of Dublin Hospitals: Annual Report.

THE thirty-third annual report on the Dublin Hospitals (nine) which receive grants from Parliament has been issued. As the tendency of public opinion of late has been to require nurses to possess more extended knowledge than has heretofore been considered necessary, the board consider it desirable that a medical officer should be specially deputed to afford them all needful instruction as to the administration of medicines, and to teach them what they should know about medical and surgical cases, as well as hygienic subjects. The number of patients in these nine institutions under treatment during the year ended 31st March last was 9304, with a mortality of 374. Exclusive of incurables the mortality was 4 per cent. of the cases treated to a termination. The Lock Hospital is an admirable institution, and it is a subject of regret that patients do not avail themselves of its benefits until their disease has become aggravated or confirmed by delay or neglect, and unfortunately they too frequently demand their discharge before a complete cure is effected. It has been suggested that provision should be made to enable the authorities to detain patients until they have entirely recovered; but this arrangement would tend to prevent patients from seeking admission, except in the case of those driven to do so by pain and misery or disfigurement. The board consider that if a hospital for diseases of this class were placed in a better and more salubrious position, and otherwise made more cheerful, its operations would be more successful than they are now, and suggest that if a new Lock Hospital were erected in the suburbs somewhat in a similar manner to the Hospital for Incurables, it would be a very great benefit. The condition of the Meath Hospital gives evidence of its being conducted in all its departments with distinguished ability. At the House of Industry Hospitals facilities are now afforded for training student nurses, by which means a great service is rendered to the community at large. At the Rotunda Lying-in-Hospital the mortality of the labour patients was 0·82 per cent., and at the Coombe Lying-in-Hospital 0·25 per cent. The board refer at considerable length to the system of election of a Master of the Rotunda Hospital, which they think could be improved. They state also that it is worthy of grave consideration whether it is well that the responsible control of so important an institution should be entrusted for seven years to any one officer. The duty of conducting the treatment of so large a number of inmates, of supervising their treatment by the assistant physicians, and of superintending the work of nurses, the general administration of so large a hospital and the instruction of students and pupil midwives, would necessarily cause extremely onerous work; but when, as it has always been, such duties were combined with private practice, which may necessitate the absence of the master from the hospital for a considerable part of his time, it is open for consideration whether such extensive and onerous functions ought not to be divided between two equally competent physicians instead of one master. They think it worthy of consideration whether it would not be advisable that a second physician should be elected at the expiration of the half-

term of the seven years, who could carry forward the work of the hospital as chief physician for a further period of three years and a half. The board again refer to the structural defects of St. Mark's Ophthalmic Hospital and the overcrowding of some of the wards as marring to some extent the working of the hospital. With regard to the proposed amalgamation with the National Eye and Ear Hospital difficulties of a legal nature have been found to intervene; and, although any amalgamations which could be made of hospitals treating the same classes of disease in Dublin would be a distinct advantage to the citizens, yet vested interests and the special sentiments of individuals prevent the desired result. The lowest average annual cost per bed for maintenance and establishment charges was at St. Mark's Hospital, where it was £32 1*s.* 3½*d.*, and the highest was at the Cork-street Fever Hospital, being £119 8*s.* 11½*d.* The Government grants for the year under notice came to £15,722 15*s.* 9*d.*

Testimonial to Mr. H. Chapman, F.R.C.P.I., &c.

Mr. Chapman having retired from the post of honorary secretary to the Irish Medical Association, Dublin, which he has held for the last seventeen years, a committee has been formed for the purpose of taking the necessary steps to present him with a memorial. Subscriptions will be received by Sir Charles Cameron, President of the Association, and by the honorary treasurers, Mr. Meldon and Dr. Minchin, and others.

Intoxicants at Wakes.

Wakes have been a fertile source of infection and have given rise to scenes of intemperance most discreditable to all concerned. A very important circular has recently been issued by the Bishop of Cloyne in reference to the distribution of drink at wakes and funerals, which may have some effect in lessening the evil. He has strictly forbidden any priest in his diocese to say Mass in any house where he finds drink has been so distributed, or to attend the funeral of the deceased, or to recommend him or her to the prayers of the congregation.

The Drainage of Kingstown.

Kingstown, which has been styled the premier township is conveniently situated near Dublin, and is one of the most charming seaside resorts in Ireland. But much as nature has done for it, the drainage is far from good, and it requires a proper system to render it thoroughly suitable as a health resort, or as a permanent residence. The town contains nearly 20,000 inhabitants, and the scheme of main drainage which would bring the sewage of Blackrock (an adjoining township) and Kingstown out into a deep channel near Bullock appears the most feasible of the many plans suggested, while the cost would not exceed 2½*d.* in the pound on the valuation. A majority of the Commissioners have voted against the scheme, but it is probable that it will be brought forward again, and may ultimately be adopted.

Belfast Hospital for Skin Diseases.

At the twenty-sixth annual meeting of the supporters of this hospital, held on July 17th, it was reported that 1164 persons had been under treatment during the previous twelve months, of whom 31 were in-patients. If funds were available the wards could one kept constantly filled. A warm friend of the charity, who has recently died, Lady Johnston, left by her will a legacy of £250, and this is in addition to £1000 she gave during her life. As a slight recognition of such liberality a ward has been called after her name. The income for the year was £318 8*s.*; the expenditure reached £329 13*s.* 10*d.*

The Shiels Institution, Armagh.

On July 16th, at a meeting of the governors of this institution, Mr. Palmer was unanimously elected medical attendant in room of the late Dr. Frazer.

North of Ireland Branch of the British Medical Association.

The annual meeting of this branch was held in the Belfast Museum on Thursday, July 16th, Dr. M'Keown, president, in the chair, when there was a large attendance of members. Mr. St. George (Lisburn) was elected president for the ensuing year, Dr. Gray (Castlewellan), treasurer, and Dr. Byers, secretary. Papers on medical subjects were brought before the meeting by the President (Dr. W. A. M'Keown), Dr. Thompson (Omagh), Drs. Killen and Calwell, Dr. J. A. Lindsay, Dr. Dempsey, Dr. O'Neill, Mr. St. George, and Dr. Byers. After the conclusion of the business of the meeting the members lunched together, Dr. M'Keown presiding.

Longevity in co. Down.

Dr. Cromie of Clough, registrar of deaths for the district of Castlewellan, has registered the death of a woman named Sarah Rooney aged 105 years. The deceased kept a lodging-house in the town of Castlewellan.

The Local Government Board, by a sealed order, have regulated the amount of the salaries, and the additional salaries attaching to the vacant offices of medical officer of the Clontarf and Howth and that of the Coolock and Drumcondra Dispensary Districts. The salary for the former will be £103 8*s.* 4*d.*, and for Coolock district £46 11*s.* 8*d.*

July 21st.

PARIS.

(FROM OUR OWN CORRESPONDENTS.)

M. Lannelongue's Treatment of Tuberculosis.

IN your issue of July 11th I furnished your readers with a *résumé* of an important contribution to the study of the treatment of tubercular disease which was communicated the day before by Professor Lannelongue to the Academy of Sciences. As in this I was chiefly concerned with the *rationale* of the method, it will not be amiss if I add a few practical details, especially as to the technique of the treatment. As already said, the end aimed at is to imitate a natural process of cicatricial repair by setting up a sclerosis of the tubercular or diseased tissues by the interstitial injection of a solution of chloride of zinc, not into the diseased or rather degenerated foci themselves, but into the tissues immediately surrounding them. The object being thus to act on the tissues in close juxtaposition with the diseased part, the injection should be made at the outer limit of the fungosities, and in such a manner as to establish a certain number of points of contact. Generally the strength of the solution used should be about 1 in 10, of which two or three drops may be injected into each determined point. This operation may be repeated several times, either through the same puncture, or through several different punctures, until from eight to twenty drops are deposited, according to the case. In the case of articular tuberculosis, it is expresaly advised that the injections be kept completely clear of the cavity of the joint; but they may be practised in the regions from which the synovial membranes draw their blood-supply—that is to say, over the bone at the level of the cul-de-sac. Any fungosities found amongst the larger ligaments of the joint may be included in the injections, but care must be taken that these latter be not made beneath the skin only. Solutions of 1 in 10 will be found the best for articular fungosities, but the author has used a solution of 1 in 40 only for his pulmonary cases, and 1 in 20 for testicular cases. He finds it best to inject but small quantities, such as two drops, at a time, multiplying the points of contact. The injections, it must be allowed, sometimes cause considerable pain, which may even endure for a very appreciable length of time. After the injection has been made, the first change noticeable is swelling of the diseased and neighbouring parts. Little or no œdema of the cutaneous tissues follows unless the injection be made into the subcutaneous cellular structures, an accident which should be avoided. Sometimes an erythematous blush may be observed, which, however, quickly subsides. At the end of a day or two the next apparent change sets in. It consists in the appearance, or rather undue prominence, of the cutaneous venous system, indicating the obstruction to the deeper circulation which follows the destruction of the vessels of the altered tissues. There is rarely or never any effusion into the joints as a result of the injections, provided of course that these cavities be carefully avoided. Palpation will detect a modification in the involved tissues the day following the injections. The irritation thus set up is at first quite localised, but soon propagates to remoter areas, indicating, in the opinion of the author, that there is not merely a diffusion of liquid, but an actual transportation of the irritated or inflammatory process along the vascular channels. The fungous growths become more consistent, and within the lapse of four days nodules quite hard and almost cartilaginous appear over the seat of each injection. The general health of the patients treated is little or not at

all affected by the injections, the temperature rarely passing 39° C. (102·1° F.). The weight of the patients is not modified while under treatment, but a distinct gain is noticeable as soon as the treatment is terminated. As to complications attending the method, they may be said to hardly exist. Sometimes a subcutaneous or intermuscular effusion of blood takes place, owing doubtless to minute vascular ruptures resulting from the intense congestion and friability of the smaller vessels. These vary from the size of a pea to that of a large nut, and may be mistaken for small abscesses. They are, however, of no great moment, and usually disappear under the influence of continued pressure. In over 2000 injections made by the author there was not one case of abscess, antiseptic precautions being, of course, strictly observed in all cases. With a 1 in 10 solution a scar may follow, especially if the injection be made under the skin only; but with weaker solutions, or where the injection is carried sufficiently deep, no such complication results. When they do follow they are rarely larger than a sixpenny piece, and involve the skin only at the seat of injection. In the case of suppurating but unopened joint cases, M. Lannelongue first aspirates the cavity and then washes it well out with sterilised water, after which he injects the solution into the periphery in several points. Sometimes the cavity refills with pus, and the abscess may open; at other times the reproduced effusion may not be purulent. In cases of tubercular bone disease with a sequestrum, a sclerosis is set up in the tissues surrounding the sequestrum, but a complete disintegration of the caseous products follows. An inflammatory action would appear to be excited in the tissue surrounding the sequestrum, which is characterised by a phlegmonous process ending in an abscess. Operative procedures are not, therefore, suppressed or superseded; on the contrary, once the sclerotic change is completed, the bony parts are in the best condition for such measures, to which recourse may then be had without fear of lighting up further infection in healthy parts beyond.

Paris, July 21st.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Inoculation of Cancerous Matter.

THE number of the *Berliner Klinische Wochenschrift* which appeared yesterday contains the following interesting article:—"Public opinion, both in medical and in non-medical circles in France, has been excited in a high degree by the publication of two cases in which a surgeon had implanted fragments of tumours into healthy tissue solely for experimental purposes. In the sitting of the Académie de Médecine of June 23rd M. Cornil stated that he had for a length of time been in possession of preparations which a foreign surgeon, whom he would neither name nor attempt to justify, had got by inoculating malignant tumours. The first case was one of sarcoma of one of the breasts. During the operation, while the patient was under narcosis, the operator implanted a small fragment into the healthy breast, which fragment healed by first intention, but then grew and attained the size of an almond in two months, whereupon the same surgeon removed it. The histological examination showed that the structure of the inoculated tumour was identical with that of the primary one, and was, as the abundant karyokinesis showed, in rapid growth. The patient died soon after of an intercurrent disease, and the necropsy showed that there was no sarcoma anywhere, especially none in the lymphatic glands in question. The second case was one of glandular carcinoma of the breast; the surgeon acted as in the first case and with the same result—namely, the rapid growth of the implanted fragment into a little tumour,—the operation for which, however, the patient refused to submit to, and withdrew from further observation. Everyone will, of course, join in the emphatic condemnation of this conduct, which was at once expressed in the Academy, especially by M. Le Fort, and declare the subjecting of otherwise healthy patients to such experiments to be a heinous crime; not to mention the circumstance that the reliability of such anonymous communications and their value as proofs seem more than questionable. So far we agree entirely with the opinions expressed in the French medical press on this occasion. But when the *Progrès Médical*, in its No. 27 of July 4th, tries to make it appear that the priority '*de cette criminelle expérience*' belongs to Germany, and cites in support of this the statement of our colleague Hahn in the *Berliner Klinische Wochenschrift* (No. 21 of 1888) and at the Surgeons' Congress in 1889, in the discussion on Hanau's demonstrations, we deem it necessary to point out the enormous difference between the conduct of the anonymous surgeon of the French communication and that of the German surgeons. In Cornil's statement a patient whose chances of cure are still great is in the course of one operation first cured and then made ill again; in Hahn's case there was no thought whatever of an operation for the removal of a tumour, much less for its cure. On the contrary, the operation was performed, as Hahn writes, 'in order not to reveal to the patient who urgently demanded an operation, the hopelessness of her condition'; and the experienced surgeon believed that, in placing her under the favourably psychical impression of a successfully performed operation, he could at the same time accept the responsibility of an experiment harmless to her and bearing on questions of eminent practical and scientific importance not otherwise capable of solution. In point of fact the subjective condition of the patient improved, and her sufferings diminished. Two months later, the implanted nodules had grown to the size of cherry-stones, and she succumbed to the progressive carcinosis of the internal organs. We have not to enter here into a discussion of the question as to the scientific result of the experiments and their importance for the cure and prophylaxis of carcinoma, and especially for the technique of the operation. On the other hand, we do not hesitate to declare that we wish to see such experiments on human beings, however important the questions on which they bear may be, performed, if at all, only by those whose scientific name and unquestionable humanity afford a guarantee that no harm whatever can accrue to the patients in question, and who accept the entire responsibility for this. The much-discussed communications of Messrs. Hahn and von Bergmann were made with all publicity both in scientific associations and in the medical press. The names of these gentlemen afford every guarantee that the fundamental ethical principles of medical action were not violated in any way in the cases in question." In the same connexion, Dr. Emil Senger, surgeon, has written as follows to the *National Zeitung*:—"The fact that experiments with cancer nodules are made on human beings cannot be denied, but human beings, especially suffering ones, have much more reason to be grateful to the said investigators than to be indignant; for the question whether cancer is in a certain sense infectious is so fundamentally important, not only for medicine and hygiene, but also for human society at large, that great sacrifices may be made for its decision. But in the above-mentioned experiments no human life is at stake. In the first place, the possibility of the transplantation of cancer is by no means to be regarded as proved; many medical men, including myself, have obtained only negative results in their numerous experiments. Secondly, it is certain that absolutely no disadvantage or pain has been occasioned to the patients of Messrs. Hahn and von Bergmann by the possible transference of the cancer nodules. There are forms of cancer, and those not rare ones, in which innumerable nodules permeate the whole body without causing the patient any great pain. Such a patient is doomed to certain death. If one could decide so important a question by implanting a cancer nodule the size of a millet seed in the body of this incurable person, thus adding one single nodule to the fifty nodes he has already, one would do him no harm, but would perhaps be able to bestow an incalculable benefit on mankind. For the sake of feeling readers who do not agree with these deductions, I should like to illustrate them by a concrete example. Cancer is so widespread a disease that certainly everyone has one cancer patient to commiserate among his intimate acquaintance, if not in his own family. Many of these patients can be cured by an operation. Formerly, when the possibility of the infectiousness of cancer was not taken into account at all, the operator drew the first cut through the cancerous breast, for instance, in order to convince himself of the correctness of the diagnosis by ocular inspection, and went on cutting with the same knife. There are certainly still many operators who, in the conviction that cancer is not infectious, operate exactly so. It is also certain that most recurrences, which are often inoperable, appear at the edges of the cuts in the cicatrix,

and it is possible that, in these cases, the operator's knife, which was to bring recovery, was the very medium of transmission. Since the transference of carcinomas became a matter not of certainty, but of admitted possibility, it has become usual to take another knife after the first cut, and to observe other precautions."

Professor Max Rubner.

Dr. Max Rubner, director of the Hygienic Institute at Marburg, has been appointed to succeed Dr. Robert Koch as professor of hygiene in Berlin. He was born at Munich in 1854, established himself as a private lecturer in the University of Munich in 1883, was appointed extraordinary professor at Marburg in 1885, and ordinary professor in 1887. To be appointed ordinary professor in Berlin is a rare distinction for so young a man. His chief work, a large handbook of hygiene, was published in 1889. His numerous other writings relate mostly to assimilation, production of heat, and nutrition.

Professor Goebel.

Professor Karl Eberhard Goebel of Marburg has been appointed Naegeli's successor as professor of botany in Munich. He taught first as a private lecturer at Wurzburg, then at Leipsic, then as professor at Rostock, and was appointed to his present post at Marburg in 1887. He is busy compiling a large work entitled "Pflanzenbiologische Schilderungen" (Biological Descriptions of Plants), for which he is using his collections made in Ceylon and Java. He was one of Naegeli's favourite pupils.

Professor Alois Martin.

Professor Alois Martin of Munich died a few days ago. He was one of the most eminent teachers of the older hygiene which regarded the public health mainly from the standpoint of the medical police. We owe to him a minute report on the cholera epidemic in Bavaria in 1854, a voluminous account of medical affairs in Bavaria, essays on mineral springs, the completion of Philipp Franz von Walther's "System of Surgery," and a biography of that distinguished surgeon. He taught in the University since 1847, and held a professorship there since 1860. His age was seventy-three.

Professor Landolt.

It is likely that Professor Landolt, of the Agricultural Academy in Berlin, will be appointed to succeed Professor Rammelsberg, who retires as director of the second chemical institute belonging to the University.

Dr. Hermann Oppenheim.

Dr. Hermann Oppenheim, director of the consulting clinic for nervous patients in the Charité, will quit the service of that hospital at the end of the summer session. His successor in the Charité will be Dr. Max Köppen of Strasburg.

Warnemünde, July 20th.

CANADA.

(FROM OUR OWN CORRESPONDENT.)

Ontario Medical Association.

THE eleventh annual meeting of this Association was convened in Toronto June 3rd and 4th, when some 200 members were present. The general sessions and meeting of sections were well attended, the papers interesting, varied in character, and well discussed. It is to be regretted that many papers had to be taken as read on account of shortness of time. Of especial note were the papers presented by Dr. Senn (Chicago), "The Surgical Treatment of Intussusception"; Dr. A. Mynter (Buffalo), "Is Early Resection or Conservative Treatment advisable in Coxitis?" and Dr. Howard Kelly (Baltimore), "Injuries of the Vaginal Outlet occasioned by Parturition." At the general sessions it has been the custom for the past few years to hold discussions upon subjects set by the committee. Following the custom, the discussion in Surgery was opened by Dr. Teskey (Toronto), on "Carcinoma"; in Obstetrics and Gynæcology, by Dr. Eccles (London), on "Myoma of the Uterus"; in Medicine, by Dr. A. McPhedran (Toronto), on "The Cardiac Phenomena of Rheumatism"; in Otology and Ophthalmology, by Dr. Reeve (Toronto), on "Points of General Interest in Otology." After the presenting of a paper by Dr. G. S. Ryerson, "The Practical Bearings of Colour Blindness," a resolution was passed calling the attention of the Minister of Railroads and Canals and the Minister of Marine and Fisheries to the imperfect methods employed in examinations for colour-blindness on railroads and in the marine service of Canada, causing thereby serious danger to the travelling public, and earnestly desiring their early consideration of the same. A luncheon was provided for the visiting members by the medical men resident in Toronto.

Ontario Medical Council: Changes in Curriculum.

The Ontario Medical Council, at its late meeting, made some important changes in the curriculum. The standard of matriculation will be the University Matriculation in Arts as laid down by the Department of Education, Latin and science subjects being compulsory. The course of study has been extended to five years, attendance being compulsory at four winter sessions and one summer session; the student during the fifth year must spend six months in a scientific laboratory, working at physiology or pathology, or in a hospital, and the balance of the time either in a hospital or with a practising physician. Graduates in Arts, having taken a science course, must take three winter sessions and one summer session; a reduction has been made in the number of lectures, but an increased amount of laboratory work is required. As to examinations, in future there will be three in place of two, the primary at the end of the second year of study, an intermediate at the end of the fourth year, written and oral, upon final subjects, and the final, practical, and oral only at the end of the fifth year. Such important changes cannot but meet with the approval of the profession in Canada. The requirements place the standard for Ontario higher than that of any licensing body in America, and it is to be hoped that the licence-conferring powers of the sister provinces will follow the good example.

Obituary.

DR. JOHN SUTHERLAND.

ON the 20th inst. the late Dr. John Sutherland was buried at Norwood Cemetery. Dr. Sutherland was really a remarkable man, and one of the leading sanitarians of this century. He played a very important part in his day, extending, as far as his services in the cause of sanitary science are concerned, from pre-Crimean times to within a few years of the date of his death at Alleyn-park, Norwood, on July 14th, 1891, in the eighty-third year of his age. The name of Dr. John Sutherland will call up a number of recollections among all the surviving army medical officers of a past generation, and among many of those of the present one; but of the large number who knew him by name and recognised the good work that he had done, few were perhaps aware of the sterling qualities he possessed, of his originality, enormous industry and painstaking, and of the great sagacity, excellent judgment, and ability with which Nature had endowed him—qualities making up what is commonly called common sense, which in him amounted almost to genius. He was a remarkably well informed man, and a constant student in literature and science. Almost to the last he was keenly interested in all the theories and hypotheses of medical and biological science, but he never allowed these to dominate his mind; he was eminently practical, and always kept a definite purpose in front of him. He never permitted himself, in his official pursuits, to be turned into any of those stray paths to the right hand or to the left which promise so much for a season, but in reality lead away from that main road which, as it seemed to him, conducted straight to the practical object he had in view. He would take up and discuss various theories and hypotheses with enthusiasm even, but it was an enthusiasm strongly tempered with judgment. In the course of a long experience he had again and again witnessed our little systems having their day and ceasing to be; theories of disease appearing and disappearing, taken up like a fashion and dropped again for some newer view, which in its turn had to give place to others. He soon recognised that it would not only be futile but wrong to base practical action, involving the probable outlay of large sums of money, on scientific grounds that might prove, after all, to be but quag-

mires. Once demonstrate that a conclusion arose naturally out of the facts and the whole of the facts, and he was willing to advise Government to take action accordingly, but not otherwise. Hence his value as a public servant. And yet what an immense deal he did to advance sanitary science! Sanitation always had with him a direct and practical aim and object—viz., that of providing pure air and water, salubrious sites and wholesome dwellings—in short, a healthy environment. In the army especially the range of modifiable conditions affecting health has first of all to be determined, and then the attainable conditions have to be secured. To a consideration of these subjects he gave great thought; they formed the occupation of his life. To say that some disease or other was solely attributable to contagion or depended upon a bacillus, and to stop there, as seems to be so much the tendency of these days, brought little satisfaction and no comfort to a practically minded man like Dr. Sutherland. He was born in Edinburgh in December, 1808, educated at the High School, and was a medical graduate of the University of that city. He spent much of his early life on the Continent, and as a young man he practised for a short time in Liverpool, where he edited the *Health of Towns Journal*. In 1848 he entered the public service, on the first board of health of which the Earl of Carlisle was the chairman, and was employed under the Home and Foreign Offices until 1855. He conducted several special inquiries, notably that of the cholera epidemic of 1848–9. He was sent as the head of a Commission to several foreign countries to inquire into the law and practice of burial; and he went to the Paris Conference on Quarantine Law of 1851–2, where Louis Napoleon, then President of the French Republic, presented him with a gold medal commemorative of the event. At the request of Lord Palmerston and Lord Panmure he went out to the Crimea in 1855 as head of the Sanitary Commission, and became associated with Miss Nightingale in Turkey. At Lord Panmure's request he returned to England in August for consultation as to the contemplated sanitary arrangements for the army, and in September he had the honour of joining the Royal dinner party at Balmoral, in order that Her Majesty the Queen and H.R.H. the Prince Consort might be informed of the steps taken for the benefit of the troops at the seat of war. He was a member of the Royal Sanitary Commission on the Sanitary State of the Army, and took an active part in preparing the report, dated 1858; also of the Royal Sanitary Commission for India, the report of which was published in 1863. Subsequently he was a member of the Barrack and Hospital Improvement Commission, with Mr. Sydney Herbert as president and Captain (now Sir Douglas) Galton, and Dr. Burrell of the Army Medical Department as members. Dr. John Sutherland was most materially assisted in his work in the Crimean inquiry by Mr. (now Sir Robert) Rawlinson and Drs. Gavin and Milroy. Dr. Sutherland and Captain Galton visited and reported on the barracks and hospitals of the Mediterranean stations, which at that time included the Ionian Islands. These reports were all presented to Parliament. The labour they entailed was very great; the beneficial, and progressively beneficial, change they brought about was enormous, and will be best understood by a comparison between the vital statistics of the army prior to the time of the Crimean War and those of the present date. In Dr. Sutherland's time it was a question of providing the essentials for the health of the army; now we have gone further, and something is being done for the soldier's comforts also. In 1865 Dr. Sutherland visited Gibraltar and Malta, and made reports on the cholera epidemics at those places. In 1866 he went on a commission to Algeria, and reported on the French army serving in that country. Besides serving on various other committees, Dr. Sutherland was a member of the Army Sanitary Committee up to the date of his retirement in June, 1888. In conjunction with Sir Douglas Galton he contributed some excellent papers on hospital construction to THE LANCET. His deafness prevented his taking part in discussions, but of the services he rendered to the State, the soldier, and the public generally there can be no manner of doubt.

THE BRIGHTON WORKHOUSE.—The two new infirmary blocks to this workhouse are now completed. They will provide room for the greatly needed better classification of the sick in the existing wards, and give improved accommodation for the imbeciles. The old infirmary buildings will in future be utilised for the aged and infirm poor.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in the subjects indicated at a meeting of the Examiners on the 14th inst.:—

Anatomy and Physiology.—Cuthbert H. J. Lockyer, student of Charing-cross Hospital; William D. Knocker, of St. Thomas's Hospital; William E. N. Dunn, H. Watson Southey, and George A. Harrison, of St. Bartholomew's Hospital; Henry J. Dean, John W. Sames, and R. Hamilton Townend, of London Hospital; Lancelot H. D. Hale and Edward J. Blackett, of St. George's Hospital; Charles Ryall, of Westminster Hospital.

Anatomy only.—Harold F. Humphreys, W. Warner Henson, and F. H. Loveless Cloud, of Guy's Hospital; W. Spinks Webb and George A. Hayden, of London Hospital; Gwilym Lewis, of St. Mary's Hospital and Mr. Cooke's School of Anatomy and Physiology; J. Claudius Young, of Buffalo University, U.S.A.

Physiology only.—Oswald Challis, of St. George's Hospital; Debonnaire F. Maunsell, Fred. W. Waters, and Michael A. Teale, of St. Thomas's Hospital; R. Withers Gilmour, of St. Bartholomew's Hospital; Sidney H. L. Archer, of London Hospital.

Passed on the 15th inst.:—

Anatomy and Physiology.—Sidney Hughes, Alfred Miller, and John C. V. Wilkins, of Guy's Hospital; William J. Evans, Roger K. Hamilton, Louis E. Dartnell, Charles A. Jones, Richard Jones, and James H. Jolley, of London Hospital; Henry H. P. Cotton and R. Nitch-Smith, of Westminster Hospital; Gerald R. Baldwin and Christopher D. Dawes, of St. George's Hospital; Archibald H. P. Dawnay and Charles H. Dissent, of University College.

Anatomy only.—James E. Jones and Archibald W. Lamb, of St. Bartholomew's Hospital; William Drake and Frederick H. E. Anning, of University College; Hubert Hope Thomas, of Charing-cross Hospital; Rees G. Jones, of London Hospital.

Physiology only.—Gwilym Lewis and Joseph E. S. Old, of London Hospital; Walter Mawer, of St. Bartholomew's Hospital; Matthew Carter, of Charing-cross Hospital.

Passed on the 16th inst.:—

Anatomy and Physiology.—Joseph C. S. Peatson, of Guy's Hospital; Cecil B. Simpson, of St. Thomas's Hospital; Frederick C. Simpson and Henry R. Andrews, of London Hospital; Frederick W. Kerbey, of London Hospital and Mr. Cooke's School of Anatomy and Physiology; Albert O. Bobardt, of Melbourne University; Charles H. Russell, of Charing-cross Hospital; Clement A. Newbald, of St. Bartholomew's Hospital; Robert H. Hogg, of Otago University.

Anatomy only.—Francis J. Loveday, of London Hospital; Frederic V. Elkington, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; Walter L. Roberts, of St. Mary's Hospital; Walter H. Morgan and William R. Larbalestier, of Charing-cross Hospital.

Physiology only.—Edward G. Frederick, of King's College; Charles W. Lanphier, William Escombe, and Arthur Godfrey Ince, of Charing-cross Hospital; Francis E. Bromley, Philip G. Williams, and Dan Davies, of London Hospital; Walter L. Stuart, of Guy's Hospital; John H. Campbell and John B. Yelf, of St. Mary's Hospital; Arthur M. Wilkinson, of Westminster Hospital; Leonard Harman, of St. Thomas's Hospital.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, IRELAND: CONJOINT SCHEME.—The following have passed the Second Professional Examination:—

G. H. Ayres, J. Behane, J. G. Burne, Moore Betty, J. F. A. Bulfin, J. Campbell, W. Coneys, J. J. Costello, T. E. Cottu, W. S. Crosthwait, M. J. Cuffe, J. J. Dolan, C. P. Hannen, R. J. Harvey, G. J. Houghton, R. D. Jephson, P. King Joyce, F. J. Matthews, H. H. Moffatt, Denis Molyneux, J. R. O'Brien, J. H. Power, W. F. Roe, Charles Skelly, R. Somerville, Hubert R. Sweeny, W. Taylor, Elizabeth A. Tennant, A. R. Twigg, H. G. Thompson, and J. R. C. Whitley.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed the recent Primary Examinations in the subjects indicated:—

Surgery.—C. C. S. Barry, St. George's Hospital; E. H. Bingley, St. Mary's Hospital; F. Dove, J. Kyffin, and M. C. Langford, London Hospital; W. F. L. Green, King's College; A. E. E. Jones, Middlesex Hospital; F. W. Pogson, Yorkshire College, Leeds; E. G. Renny, D. Sims, G. C. W. Williams, and E. H. Willock, St. Thomas's Hospital; A. Richardson, University of Edinburgh; P. J. Ryan, University College; C. C. Vigurs, Cambridge University and St. Mary's Hospital.

Medicine, Forensic Medicine, and Midwifery.—W. Anderson, University of California; A. C. Dornford, London Hospital; J. George, King's College; W. C. Hinde, Middlesex Hospital; E. J. Steegmann, St. Mary's Hospital.

Medicine and Midwifery.—E. H. Bingley and C. F. Warren, St. Mary's Hospital; R. A. Earle, Middlesex Hospital; T. H. English, London Hospital; H. J. Forster, Westminster Hospital; A. F. Gervis, St. Thomas's Hospital; T. W. Smith, King's College.

Forensic Medicine and Midwifery.—A. G. Haydon, St. Bartholomew's Hospital; A. W. C. Herbert, St. Mary's Hospital; S. Melville, University College.

Medicine.—H. C. Coopland, St. Bartholomew's Hospital; C. O'Sullivan, London Hospital.

Forensic Medicine.—R. Jackson, London Hospital; G. C. W. Williams and E. H. Willock, St. Thomas's Hospital.

Midwifery.—S. A. E. Griffiths, Middlesex Hospital; G. F. Knipe, University College, Liverpool; P. G. Laver, St. Thomas's Hospital.

To Messrs. Anderson, Coopland, Dornford, George, Jackson,

Knipe, Melville, Richardson, Ryan, Williams, and Willock was granted the Diploma of the Society, entitling them to practise Medicine, Surgery and Midwifery.

VICTORIA HOSPITAL, HULL.—The Marchioness of Salisbury formally opened on Wednesday the Victoria Hospital for Sick Children, Hull.

DEATH OF A CENTENARIAN.—Mr. R. W. J. Evans, the medical officer of health, has reported to the Wrexham Town Council the death of Mrs. Baker, a resident in the borough, who lived to the advanced age of 101 years. She had always been an active woman; and, excepting failing eyesight, her senses were perfect and her memory good.

GIBRALTAR WATER-SUPPLY. — The question of water-supply at Gibraltar has long been a difficulty, and one with which the authorities must sooner or later deal. We learn that owing to the scarcity of water at the present time the Governor has placed the garrison upon short allowance, adults receiving a gallon daily and children half a gallon.

LIQUID OXYGEN.—Professor Olszewski, of Cracow, recently succeeded in producing 200 grammes of oxygen in a liquid state. The experiment was made in the presence of numerous members of the Polish Naturalists' Congress, and the explanations given as to the qualities of the new fluid are said to have made a profound sensation.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The tenth annual meeting was held on July 10th, Mr. T. Gunton Alderton in the chair. The report of the Council and balance-sheet were adopted, and the following officers for 1891-92 were elected. President: Dr. Charles Wells. Vice-Presidents: Drs. Clippingdale, Abraham, and Ball, and Mr. R. Lloyd. Council: Messrs. Benham, Blenkinsop, Edwards, Clemow, Batten, Mark Dunn, Schacht, Masters, Fennings, Mansbridge, and Coutts. Treasurer: Mr. T. Gunton Alderton. Secretaries: Dr. Symons Eccles and Mr. J. H. Menzies. Librarian: Dr. Schacht.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—Dr. E. W. Hope, assistant medical officer of health for Liverpool, presided over a meeting of the North-Western Branch of this Society on the 17th inst. A paper entitled "The Appointment, Position, and Tenure of Office of the Medical Officer of Health" was read by Dr. Hirst (Prestwich). He pointed out that at present about two-thirds of the medical officers received salaries of not over £50 per year, and more than one-fifth of them had salaries less than £20. Medical officers, he contended, should be under the control of a central authority, should work in unison, and should be protected in their duties.

PRESENTATIONS. — Mr. J. Rogerson, L.R.C.P., L.R.C.S. Edin., of Cambuslang, Glasgow, who has recently left the district for an appointment at Dalserf, has been presented by his friends at Cambuslang with a case of surgical instruments and a purse of sovereigns as tokens of esteem. — The members of the branch of the St. John Ambulance Class at Chatham, formed among a number of ladies of that town, have presented Mr. Walter Buchanan, M.R.C.S., of Paddock House, Chatham, with a testimonial consisting of a complete set of brass ornaments for a writing table, in appreciation of his lectures and instruction on "First Aid."

ACTION AGAINST THE NATIONAL MEDICAL AID SOCIETY, LIMITED (LONDON).—The *Sussex Daily News* has the following paragraph:—"At the Tunbridge Wells County Court, Messrs. Beale and Abbott, surgeons, of Tunbridge Wells, sought to obtain an injunction against the National Medical Aid Society, Limited (London), to restrain them from making misrepresentations, whereby patients of the plaintiffs were induced to believe that the Society employed them as their medical men and so gained an accession of membership by such statements, which were said to be false. The case excited great interest. His Honour Judge Homersham Cox entered a non-suit, being of opinion that the case was one of slander, which could not be tried at his Court. Counsel for the defendant denied the allegations made."

THE ROYAL VACCINATION COMMISSION.—Lord Herschell presided at the meeting of this Commission held on Wednesday. Mr. Biggs, of the Leicester Board of Guardians, was re-examined and cross-examined upon the evidence he had previously given against compulsory vaccination.

CLAYTON HOSPITAL, WAKEFIELD.—The 104th report of this excellent charity has just been issued. During the year 1890, 504 in-patients and 3595 out-patients were treated. Reference is made to the bequests of £1000 each from Mr. Andrew Packard and his sister, Miss Packard, both of Ossett. On the year's finance a balance remained in hand of £135 12*s.*

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—On Saturday the Duke of Westminster, accompanied by the Duchess, formally opened the new surgical wing of this institution. It now contains 190 beds. The out-patient attendances for the past year numbered 25,000. The annual expenditure is about £13,000, and of this sum £8000 has to be raised in contributions. His Grace having declared the wing open, the Duchess received presentation purses to the amount of nearly £100. To complete the new building about £250 more are required.

ARBROATH INFIRMARY.—This infirmary is in a very favourable state. The report for the past year shows that the number of patients treated was 207. In addition there had been 234 dispensary accidents. The financial position shows a small deficit. The endowment fund (exclusive of the Panmure annuity of £50) now amounts to £10,107 8*s.* 10*d.* Allusion is made to the opening of a Convalescent Home, near Arbroath, which has been provided by the generosity of two gentlemen who are natives of the town. The income of this home shows a balance over expenditure of £16 17*s.* 10*d.*, which was carried to the capital account.

LIBELLING A MEDICAL MAN.—At the Durham Assizes, on July 15th, Mrs. Patchett was charged with writing a series of filthy letters libelling Mr. Square of Sunderland. The prosecution was undertaken on behalf of Mr. Square by the Medical Defence Union (Limited). The *modus operandi* pursued was to send letters of a gross character to ladies whom Mr. Square attended professionally accusing them of improper relations with the surgeon; by the same post the lady's husband, if she were married, was so informed by the same means; and simultaneously the surgeon received a letter telling him that these letters had been sent, and threatening to continue these attentions to every patient until he was driven from the town. In consequence of the efforts of the Union in 1890 the annoyance temporarily ceased, but was resumed in May last. After long continuous efforts most convincing evidence was obtained against the prisoner, who at the Assizes pleaded guilty, and was bound over in her own recognisances and two sureties to be of good behaviour.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at Midnight on July 21st, 1891.

Hospital.	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever.	Other diseases.	Total.	
Eastern Hospital	166	56	..	46	..	268	442
North-Western Hospital	109	39	..	26	1	175	443
Western ,,	122	17	..	8	3	150	224
South-Western ,,	143	16	..	13	1	173	340
South-Eastern ,,	147	8	..	15	1	171	462
Northern ,,	159	12	..	..	..	171	480
Totals	846	148	..	108	6	1108	2391

SMALL-POX.—*Atlas* hospital ship, 1.

MEDICAL NOTES IN PARLIAMENT.

Children's Life Assurance Bill.

ON Monday, July 20th, in the House of Lords, the Earl of Derby brought up the report of the Select Committee to which this Bill had been referred, and stated that they were of opinion that it should not proceed further this Session.

Public Health (Scotland) Acts Amendment Bill.

On the motion for the second reading of this Bill, the Earl of Camperdown moved that the second reading take place that day three months, and Lord Elphinstone, in supporting the amendment, said that not a single County Council in Scotland had had the opportunity of considering the Bill. Lord Herschell pointed out that the measure had passed the other House, which was a circumstance which ought to have some weight with their lordships. The amendment was negatived by 71 to 23, and the Bill was read a second time.

Lunacy Bill.

On the consideration of this Bill by the Standing Committee of the House of Lords, the Lord Chancellor moved the omission of the Clause which provided that any question arising as to lunatics between authorities having the care of such persons might be submitted at the request of either party to the High Court of Justice or to arbitration. The Earl of Kimberley suggested that the clause should simply give the power of settlement by arbitration. The Lord Chancellor assented, and the clause was modified accordingly. On the motion of Lord Thring, a clause was agreed to providing that where a warder is received into a licensed house not within the immediate jurisdiction of the Commissioners in Lunacy, notice of his reception shall be given to the Commissioners within twenty-four hours. The committee agreed to a further amendment proposed by Lord Thring, requiring the Commissioners to inquire into complaints as to lunatic patients being allowed to go outside the hospital without a sufficient number of officers to control them. The Lord Chancellor said he was quite willing to accept these amendments, but if they were opposed in the other House he could not pledge the Government to support them. The Bill was reported as amended.

Ventilation of the House of Commons.

The Select Committee of the House of Commons appointed to inquire into the ventilation of the House met again on Monday, when there were present Mr. David Plunket (chairman), Sir W. Guyer Hunter, and Dr. Farquharson. Mr. Binnie, the engineer to the County Council, has been examined. He said one of the evils into which we were getting with our main drainage system was that the ventilators were being closed and the gas penned up. He recommended the carrying of a ventilating pipe up the side of the Clock Tower. Mr Wheeler, a surveyor, of Westminster, said the drainage outside the Houses of Parliament was very unsatisfactory, owing to the want of capacity in the low-level sewers.

Report of Ventilation Committee.

Sir Henry Roscoe, in a report which has been laid before Parliament, gives the results of some experiments made by him with regard to the possibility of freeing the air supply of the debating chamber of the House of Commons from the floating germs of disease which are constantly present in the air. The results of the experiments as a whole proved that the filtration of the air on a large scale could practically remove all the floating aerial germs. The effect of filtration upon the air within the chamber itself had yet to be ascertained, and it would be interesting to continue the experiments from that point of view.

THE METROPOLITAN HOSPITALS INQUIRY.

CLOSE OF THE EVIDENCE.

THE Select Committee of the House of Lords on the Metropolitan Hospitals met on Saturday. Earl Sandhurst presided, and the other members of the committee present were the Earl of Kimberley, Earl Cathcart, Lord Lamington, Lord Thring, Lord Clifford of Chudleigh, Lord Zouche of Haryngworth, and Lord Monkswell.

The Register of Trained Nurses.

Dr. Bedford Fenwick, examined by the Chairman, said he wished to give evidence with regard to the Register of Trained Nurses and the work of the Royal British Nursing Association, and to contradict certain statements made by Mr. H. C. Burdett. He denied that the Register gave a bogus complexion to anyone, for it only affected nurses who had been trained. The fact of a certificate being in a nurse's pocket did not constitute registration. It was a very common thing to have forged and stolen certificates, and medical men and nurses, thinking the certificates genuine, accepted them, and made appointments upon their strength. Only a fortnight ago it was discovered at a London hospital that a nurse had been admitted, and had obtained a responsible position upon a certificate which had turned out to be a forgery. Unfortunately, it was a well-known fact that such things were frequently done. After a nurse received her certificate and left the hospital where she had been trained, she became a free agent. The hospital or the matron had no control over her. Another misfortune was that the certificate became the property of the nurse, and could not be recalled, however badly she might behave. She might commit a serious crime, and, on being released from prison, she might go on nursing as before on the strength of her certificate. The object of the Register was to give some measure of protection to the public. The Registration Board did not issue certificates to all nurses, but a nurse who could prove that she had been trained and had a good character was eligible for registration. She simply received a certified copy of the entry on the Register, but she received no certificate. Each nurse paid 10s. 6d. for registration. Any assistance to the Association had been definitely refused by the London Hospital. He believed that when the truth became generally known, the public would express their deep gratitude to the Princess Christian for the great work she had done in this matter. The Association had undertaken the work because they could not get anybody else to do it. The Register was before the public, and was being bought. Medical men were accepting it and expressing acknowledgment of the assistance it gave them. No fewer than 3000 nurses had joined the Association in order to pay for the system being carried out, and the Register would be published every year until Parliament took the question up. Exactly the same thing was done in the case of the Medical Register. It was first published by private effort.—By the Earl of Kimberley: In the Register there were the names of eleven nurses who were at work before 1870, and who did not hold certificates. All the others had been in the hospitals for the periods stated against their names.—Do you undertake from time to time to see that these nurses continue to be of good conduct?—We have no means of keeping in touch with our nurses. We accept and register them upon their training and upon the evidence we receive that they are of good character when registered.—By Lord Monkswell: The Association would certainly not keep on the Register a nurse who had been convicted of crime. They had power to strike off the names of nurses. In fact, each nurse signed a declaration allowing the Registration Board to remove her name from the Register if called upon to do so. The Association interfered in no way with nurses' training schools. Their interference only began when the training of the nurse was complete.—By Lord Thring: You put down in the Register that a nurse has been in a hospital a particular time, but mere attendance is not a guarantee that she is a competent person?—We simply state that she was in a hospital where technical instruction is given for a specified time.

The Charity Organisation Society.

Mr. C. Loch, secretary of the Charity Organisation Society, gave evidence as to the working of out-patient departments and the management of hospitals generally. In reply to the Chairman, he said that the present inquiry officer system was not a sufficient check upon abuse of out-patient departments. It was too limited in its scope, and was deficient in the matter of organisation. Inquiry of the patients themselves was, in his opinion, difficult and unsuitable; while the pay system was contrary to the *raison d'être* of the institutions. What he advocated was a limitation in the number of cases to each medical officer, with what he should call the help of an almoner. This system was in force in St. George's and St. Thomas's Hospitals. They must, in the first place, accept the fact that out cases were necessary for medical education. This method would distribute instead of centralising the work both of inquiry and relief, and strengthen the position of the hospital in the locality. Who, in your opinion, are the proper persons to go to the free hospitals?—I should leave it open to anyone to go. I do not think that the question of going there in the first instance matters very much, and I cannot define very well the person who should go. I should say that, first of all, cases where poor-law relief was wanted should not go there unless wanted for medical education. Next, there are a number of cases who can make provision for themselves; they should not go there. When you go past those, which are more or less clear lines, you come to a somewhat indiscriminate mass in which you have to judge each case by itself. In further examination by the Chairman, witness said he did not favour an arbitrary wage limit, because it would be almost impossible to apply it fairly. He thought it possible to have some organisation between poor-law infirmaries and hospitals. He did not think it would be desirable to transfer cases from the poor-law infirmaries to the hospitals. The poor-law system should be kept independent, and not merged in a charitable system.—By Lord Lamington: He did not think it practicable to do away with out-patient departments.—By Lord Monkswell: He would be in favour of provident dispensaries if managed after the manner of benefit societies. He did not think that in the long run the charitable provident dispensary would hold its own.—By the Chairman: A central hospital board seemed to him necessary. He did not think that either the Hospital Sunday or the Hospital Saturday Funds could undertake the work of such a board. He would not like to see the individuality of the hospitals done away with. He accepted the principle that the supervision must be voluntary and not municipal, and he thought the Paris system gave good suggestions for working out a system of supervision for London. There might be a large board, representative of medical and charitable interests, and its duties might include visiting and reporting the publication of specific information with regard to each hospital, attention to sanitation, and regard to the work of nursing. This body might report upon every proposal for a new hospital, and the public would thus be informed as to the views of responsible persons upon the subject. He would only fall back upon licensing as a further resort.

By the Earl of Kimberley: He was inclined to think that he would not give this body any power of compulsion. They might, however, report to some higher body.

The Chairman then intimated that this closed the evidence which the Committee proposed to hear, and he thanked his colleagues for their attendance and the care they had bestowed upon the inquiry.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BLOOMER, F. W., L.S.A., has been appointed Assistant Medical Officer to the Shardlow Union.

BRIGHT, ARCHD. L., M.R.C.S., L.R.C.P. Lond., has been appointed Second Chloroformist to the Middlesex Hospital, vice Shepard, deceased.

BRISTOW, GEO. HAMILTON, M.D., M.R.C.S., L.S.A., has been appointed House Physician to the Hospital for Diseases of the Chest, Brompton.

DONALD, ARCHIBALD, M.B., C.M., D.P.H. Glasg., has been appointed Medical Officer and Police Surgeon for Paisley, vice J. T. Donald.

EGLINTON, G. W., L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for Street, Somerset.

FREELAND, R. S., M.R.C.S., L.R.C.P., has been appointed House Surgeon to Guy's Hospital.

GOSSAGE, A. M., M.B. Oxon., has been appointed House Physician to Westminster Hospital.

GOWING, B. C., M.R.C.S., has been reappointed Medical Officer of Health for the Penistone Urban Sanitary District.

GREEN, H. W. GORDON, M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Westminster Hospital.

HAMILTON, S., M.D., M.Ch., M.A.O. Irel., has been appointed House Surgeon to the County Donegal Infirmary, Lifford.

HARING, NATHAN C., M.B. Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Manchester Hospital for Consumption and Diseases of the Throat.

HEPBURN, W. A., M.D. St. And., F.F.P.S. Glasg, has been reappointed Medical Officer of Health for the Rural Sanitary District of the Durham Union.

HODGSON, H., M.R.C.S., L.R.C.P., has been appointed Assistant House Surgeon to Guy's Hospital.

JORDAN, J. F., M.B., B.Ch. Irel., has been appointed Demonstrator of Anatomy, Queen's College, Birmingham.

LARKHAM, E. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer to the Infirmary of the Salford Union, vice Shaw.

LITTLETON, P. R., M.R.C.S., has been reappointed Medical Officer of Health for the Rural and Urban Sanitary Districts of Ashbourne.

MARSTON, F. E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Borough of Welshpool, vice Barrett, resigned.

MCCRAITH, RICHD., B.A., M.B., B.Ch. Dub. Univ., has been appointed House Surgeon to the Oldham Infirmary, vice Henry Langdale, resigned.

MEAD, GEO. O., L.R.C.P. Edin., has been reappointed Medical Officer of Health for the Newmarket Urban Sanitary District.

MILLER, A. C., M.D., C.M. Edin., has been appointed Medical Officer of Health for the Burgh of Fortwilliam, Inverness-shire.

NIGHTINGALE, P. A., M.B. Edin., has been appointed Junior Medical Officer at Johore, Singapore.

PARSONS, F. J. C., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer of Health for the Bridgwater Urban and Rural Sanitary Districts.

PENFOLD, F. W. H., M.R.C.S., has been appointed Medical Officer for the Rainham Sanitary District.

RICHARDS, J. S., M.B., B.S. Lond., has been appointed House Physician to Guy's Hospital.

ROGERS, W. G., M.B. Lond., has been appointed Assistant House Surgeon to Guy's Hospital.

ROLLESTON, H. D., M.A., M.B. Cantab., M.R.C.P. Lond., has been appointed Assistant Physician to the Victoria Hospital for Children, Chelsea.

ROUSE, EZEKIEL, L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Health to the Barnstaple Port Sanitary Authority.

RUDD, WM. A., M.B., M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer to the Dorset County Asylum.

RYAN, R. P., L.R.C.S., L.R.C.P. Irel., L.M., has been appointed Second Assistant Medical Officer to the Norfolk County Asylum, Thorpe, near Norwich.

RYGATE, H. B., M.R.C.S., L.R.C.P., has been appointed House Surgeon to Guy's Hospital.

SHARMAN, E. H., M.R.C.S., L.R.C.P. Lond., has been appointed House Physician to Westminster Hospital.

SHIELDS, GEORGE, M.B., C.M. Edin., has been appointed Medical Officer for the Greystoke Sanitary District, Penrith.

TEBBS, W. H. A., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Westminster Hospital.

TURTON, W. H., M.B., C.M. Edin., has been appointed Medical Officer for the Heanor and Codnor Sanitary Districts of the Basford Union.

WINSLOW, W., M.B., B.C. Cantab., has been appointed House Physician to Guy's Hospital.

WYNNE, E. T., M.B. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Resident Assistant Medical Officer to the Parish of St. Leonard, Shoreditch.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

ANCOATS HOSPITAL, Manchester.—Resident Junior House Surgeon. Salary £50, with board and washing.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Anæsthetist. A small honorarium is given.

CHILDREN'S HOSPITAL AND DISPENSARY, Manchester.—Medical Officer. Salary £180 per annum.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. No salary. Board and residence and allowance for washing provided.

CLERGY MUTUAL ASSURANCE SOCIETY, The Sanctuary, Westminster.—Physician.

COLLEGE OF STATE MEDICINE, 101, Great Russell-street, W.C.—Professorship of Bacteriology.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary £120 per annum, with board, lodging, and washing.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—House Physician. Salary £60 per annum, with board and lodging in the Hospital.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House Physicians.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury.—Assistant Physician.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury.—Two Casualty Medical Officers for one year.

LIVERPOOL DISPENSARIES.—Assistant Surgeon. Salary £80 per annum, with apartments, board, and attendance.

LIVERPOOL STANLEY HOSPITAL.—Junior House Surgeon. Salary £70, with board &c.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL AND DISPENSARY.—Resident House Surgeon. Salary £70 per annum, with furnished rooms, attendance, and board.

NEWPORT AND COUNTY INFIRMARY AND DISPENSARY, Newport, Mon.—House Surgeon. Salary £100 per annum, with board and residence (no stimulants).

NOTTINGHAM BOROUGH ASYLUM.—Locum Tenens for a month from the middle of August next. Remuneration £2 2s. a week and travelling expenses.

PARISH OF ST. LEONARD, Shoreditch.—Medical Officer of Health to the Vestry. Salary £200 per annum. (Apply to the Vestry Clerk, Town Hall, Old-street, Shoreditch, E.C.)

QUEEN'S COLLEGE, Birmingham.—Lecturer on Operative Surgery.

QUEEN'S JUBILEE HOSPITAL, Richmond-road, Earl's-court.—Dispenser. Salary 30s. weekly.

SALISBURY INFIRMARY.—House Surgeon. Salary £100 per annum, with board, lodging, and washing.

SEAMEN'S HOSPITAL SOCIETY, Greenwich, S.E.—Junior House Surgeon for Branch Hospital, Royal Victoria and Albert Docks, E. Salary £60 per annum, with board and residence.

ST. LUKE'S HOSPITAL FOR LUNATICS, Old-street, E.C.—Two Clinical Assistants for six months. Board and lodging provided.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House Surgeon (who will also be required to act as Surgical Registrar). Salary £100 a year, with board, lodging, and washing.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House Physician (who will also be required to act as Chloroformist, Pathologist, and Medical Registrar). Salary £100 per annum, with board, lodging, and washing.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Honorary Surgeon.

Births, Marriages, and Deaths.

BIRTHS.

ALEXANDER.—On July 21st, at Gatefield House, Faversham, the wife of Sidney R. Alexander, M.D. Lond., of a daughter.

BROOKE.—On July 17th, at Addison House, Victoria Park, Manchester, the wife of Dr. H. G. Brooke, of a daughter.

FINLAY.—On July 15th, at South Camp, Aldershot, the wife of Surgeon-Major W. Finlay, Medical Staff, of a son.

GARSIA.—On July 17th, at Weston-super-Mare, the wife of W. Marston Garsia, M.D., of a son.

MANSEL-HOWE.—On July 18th, the wife of Dr. Mansel-Howe, Londesborough House, Godstone, Surrey, prematurely, of a son.

SANSOM.—On July 17th, at Eresby-road, West Hampstead, N.W., the wife of H. Arthur Sansom, M.D. Lond. &c., of a son.

TATHAM.—On July 20th, at Halesowen, Worcestershire, the wife of Ernest J. Tatham, M.D., of a daughter.

TWINING.—On July 18th, at The Knoll, Salcombe, South Devon, the wife of Alfred H. Twining, M.R.C.S., of a daughter.

WATSON.—On July 18th, at Hendre, Overton Park, Cheltenham, the wife of Deputy Surgeon-General George Alder Watson, Bengal Army (retired), of a son.

MARRIAGES.

BATTERSBY—LORY.—On July 16th, at Bagshot, H. L. Battersby, Surgeon M.S., son of the late Wm. Battersby, of Rathmines, Dublin, to Emily Gertrude, eldest daughter of the Rev. Pendarves Lory, Vicar of Bagshot.

GODDING—DENING.—On July 16th, at St. Margaret's, Ifield, near Crawley, by the Rev. W. Loveband, M.A., James Godding, L.R.C.P., M.R.C.S., of 747, Commercial-road, Limehouse, to Charlotte Ethel, second daughter of Charles William Dening, of Whitehall, Crawley, Sussex.

O'REILLY—CONINGHAM.—On July 18th, at St. Augustine's Church, Tunbridge Wells, Brigade-Surgeon J. J. O'Reilly to Laura, second daughter of the late Lieut.-General Coningham, Madras Cavalry.

THORNHILL—CURRIE.—On July 15th, at St. Andrew's Presbyterian Church, W., William Henry Thornhill, B.A., M.D., Surgeon-Major Indian Medical Service (27th Regt. M.I.), to Jeannie, elder daughter of the late Donald Currie, Esq., of Mull, N.B.

DEATHS.

ASHWELL.—On July 13th, at his residence, Stoke Lodge, Stoke-upon-Trent, M. H. Ashwell, M.R.C.S., aged 65.

BERNARD.—On July 17th, John Bernard, Inspector-General (late) Royal Navy.

CAREY.—On July 12th, at his residence at Taunton, John Carey, M.D. Lond., M.R.C.S.

CAUTLEY.—On July 13th, at Killinghall, Ripley, William C. Cautley, M.R.C.S., aged 63.

COOPER.—On July 12th, at Cromer, James Cooper, F.R.C.S., aged 74.

MONRO.—On July 19th, at his residence, 44, Beckenham-road, Penge, Charles Edward Monro, L.R.C.P. Edin., M.R.C.S. Eng., formerly of Newtown, Montgomeryshire, aged 44.

RITCHIE.—On July 15th, at his residence, Otley, Thos. Ritchie, L.R.C.P. L.R.C.S. Edin., aged 59.

RUDDOCK.—On July 15th, at his residence, Saville-place, Clifton, Richard Beadon Ruddock, M.R.C.S., son of the late Rev. Noblett Ruddock, Vicar of Stockland, Bristol, in the 79th year of his age.

SUTHERLAND.—On July 14th, at his residence, Oakleigh, Alleyn Park, Norwood, John Sutherland, M.D., in his 83rd year.

TOMSON.—On July 12th, at Langley-street, Luton, K. Tomson, M.R.C.S., L.S.A., aged 68 years.

WALLIS.—On July 21st, at Whitingham, Preston, Lancashire (from the results of an attack of influenza), M. L., the beloved wife of John A. Wallis, M.D.

WATSON.—On July 18th, at Gorleston, Charles John Watson, M.R.C.S., late of Heigham Hall, Norwich, aged 37.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

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La Pratique d'Hydrothérapie. Par E. Duval. 1891. pp. 376.

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Cremation *versus* Burial. By Wm. Holder, M.R.C.S. 1891. pp. 45. Price 1s.

CASSELL & CO., London.
The Treatment of Typhoid Fever. By I. Burney Yeo, M.D., F.R.C.P. 1891. pp. 70.

CHURCHILL, J. & A., New Burlington-street, London.
A Manual of Practical Hygiene. By the late E. A. Parkes, M.D., F.R.S. Edited by J. L. Notter, M.D. Eighth Edition. 1891. pp. 769.

LECROSNIER ET BABE, Paris.
Traité Théorique et Pratique du Massage. Par le Dr. G. Norström. Deuxième Édition. 1891.

PENTLAND, YOUNG J., Edinburgh and London.
Surgical Anatomy for Students. By A. M. Sheild, M.B. Cantab., F.R.C.S. 1891. pp. 226.
International Clinics. A Quarterly Journal of Clinical Lectures by Professors and Lecturers. Edited by John M. Keating and others. Vol. I. 1891. pp. 357.

SCHWABE, BENNO, Basel.
Atlas der Cystoskopie. Von Dr. Emil Burckhardt. Mit 24 Tafeln in Farbendruck. 1891.

STEINHEIL, G., Paris.
Traité Pratique de Chirurgie Infantile. Par Prof. E. Owen. Traduit sur la Deuxième Édition, par Dr. O. Laurent. 1891.

THE OFFICES OF THE BRITISH AND COLONIAL DRUGGIST, New Bridge-street, London.
Modern Materia Medica, for Pharmacists, Medical Men, and Students. By H. Helbing, F.C.S. Second Edition. 1891. pp. 115.

Atlas of Illustrations of Pathology; compiled (chiefly from original sources) for the New Sydenham Society; Fasciculus VIII.: Diseases of Brain and Spinal Cord (H. K. Lewis, London, 1891).—Progress Report on Koch's Treatment of Tubercular Disease; by J. W. Springthorpe, M.A., M.D. Melb., M.R.C.P. Lond. (Stillwell & Co., Melbourne, 1891).—The Journal of Comparative Pathology and Therapeutics; edited by J. M'Fadyean, M.B., B.Sc., F.R.S.E.; Vol. IV., Part 2 (W. & A. K. Johnston, Edinburgh and London); price 2s. 6d. quarterly.—Archiv für Pathologische Anatomie und Physiologie und für Klinische Medicin; herausgegeben von Rudolf Virchow; Band CXXV., Heft 1 (Georg Reimer, Berlin, 1891).—Revue de Chirurgie; onzième année, No. 7 (F. Alcan, Paris, 1891).—Revue de Médecine; onzième année, No. 7 (F. Alcan, Paris, 1891).—Die Protozoen als Krankheitserreger; von Dr. L. Pfeiffer (Gustav Fischer, 1891).—Ueber die Physiologische Grundlage der Tuberculinwirkung; von Prof. O. Hertwig (G. Fischer, Jena, 1891).—Archives de Neurologie: Revue des Maladies Nerveuses et Mentales; publiés sous la direction de J. M. Charcot; Vol. XXII., 1891 (Bureaux du *Progrès Médical*, Paris, 1891). — Recueil d'Ophthalmologie, troisième série, treizième année, No. 7, Juillet, 1891 (Félix Alcan, Paris). — Archives of Pediatrics; Vol VIII., July, 1891, No. 91 (J. B. Lippincott Co., Philadelphia and London).—Revue des Sciences Médicales en France et à l'Etranger; No 75, Juillet, 1891 (G. Masson, Paris). — Instinct in Animals and Intelligence in Man Contrasted; by W. K. Parker, M.D. (reprint from the Journal of the American Medical Association, Chicago, 1891).—The Baltimore Medical and Surgical Record; Vol. I., June, 1891 (F. H. Graham, Baltimore, Maryland). — Archives of Surgery; by Jonathan Hutchinson, LL.D., F.R.S.; Vol. III., No. 9, July, 1891 (J. & A. Churchill, London); price 2s. 6d.—Les Maladies des Enfants à Paris; par Dr. Elie Goubert (J. B. Baillière et Fils, Paris, 1891).—The Dietetic Gazette: a Monthly Journal of Physiological Medicine; Vol. VII., July, 1891 (Office of the Dietetic Gazette, New York; and Beaumont & Co., London).—British Pharmaceutical Conference; Unofficial Formulary, 1891 (J. & A. Churchill, London). — Revue Internationale des Falsifications, quatrième année, douzième livraison (Bureaux de la Rédaction et de l'Administration, Amsterdam).—Zur Aetiologie des Diabetes; von Sanitatsrath Dr. Richard Schmitz-Neuenahr (L. Shumacher, Berlin). — The Journal of Nervous and Mental Diseases; edited by C. H. Brown, M.D. New York, August, 1890 (M. J. Rooney & Co., New York).—A Group of Cases of Sclerosis of the Spinal Cord; by J. J. Putnam, M.D. Boston (reprinted from the Journal of Nervous and Mental Disease, New York, February, 1891)

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 23rd, 1891.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Maximum Temp. in Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
July 17	29·85	W.	69	61	128	85	59	..	Cloudy
,, 18	30·00	S.W.	62	62	100	74	61	.	Raining
,, 19	30·03	S.W.	63	59	101	69	56	·17	Cloudy
,, 20	30·14	W.	62	57	121	73	54	·76	Cloudy
,, 21	30·04	W.	63	61	115	73	61	·02	Cloudy
,, 22	29·89	W.	63	59	119	73	56	.	Cloudy
,, 23	29·92	W.	59	55	70	62	56	·03	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

REPORTED DEATH FROM REVACCINATION.

A CORRESPONDENT, writing to the *Echo*, states that a postman named Albert Edward Bank, of Horley, has died from revaccination, "the subtle vaccine virus having invaded the brain and developed a tumour in the cerebellum." The man, it is also stated, was recently a patient in a London hospital. We trust that the case will be investigated by the Local Government Board. The letter is signed "C. Pearson, Horley, Surrey."

Dr. David Welsh.—In the case of vendor and purchaser, in the absence of any agreement to the contrary, it is usual for each party to pay the charges of his own solicitor.

Mr. C. Mackey should consult our Students' Number.

Anxious Enquirer has not enclosed his card.

"CONCAVE LARYNGEAL MIRRORS."

To the Editors of THE LANCET.

SIRS,—If Dr. Batten, who writes on the above subject in THE LANCET of May 11th, will refer to Mackenzie's "Diseases of the Throat," vol. i. (German edition, p. 309), he will find that in 1859 Wertheim recommended concave laryngeal mirrors in order to obtain a magnified image, and that Mackenzie classifies them as useless for practical purposes. The following extract is from Solis Cohen's "Diseases of the Throat" (second edition, p. 35): "Concave laryngeal mirrors, of a focus of four or more inches, as originally suggested by Wertheim, are sometimes useful in getting enlarged views of parts which lie at or very near the focal distance of the mirror, and are reflected from it in its central part; but the distorted images of the other parts of the structures, as reflected near the margin of the mirror, are very perplexing and misleading. Nevertheless, an additional examination of special points in the concave laryngoscopic mirror after the general view has been obtained in the plane laryngoscopic mirror is sometimes of great advantage, and the manipulation is no more difficult in the one case than in the other." Voltolini ("Die Krankheiten der Nase" &c., 1888, p. 69) says that concave mirrors are used with difficulty in laryngoscopy, owing to the different distances at which the structures to be examined are situated, and to their movement on phonation. For rhinoscopy, on the other hand, he recommends these mirrors highly. From the same work (p. 70) it appears that Türck himself tried concave laryngoscopic mirrors, but without much success. Dr. Batten may find these mirrors of more use; but the above references suffice to show that concave mirrors have frequently been tried before for laryngoscopy.

I am, Sirs, yours truly,

Brighton, July 16th, 1891. E. CRESSWELL BABER.

THE CLIMATE OF BRITISH COLUMBIA.

DR. MARK S. WADE (Victoria, British Columbia) forwards a paper on the climate of that island, in which he claims it to be a competitor among those countries which possess features recommendatory to those in search of a health-renewing climate. He describes it as the Switzerland and the California of Canada, in which every conceivable variety of climate peculiar to the north temperate zone is to be found. The surface of the country is covered with forest growth, and is broken frequently by streams, rivers, lakes, and long in-reaching arms of the sea, resembling the sea-board lochs of Scotland. The rainfall varies from dry to very wet, according as the district is low lying or mountainous. In the valley districts the soil is dry and sandy, and creeks and lakes are less numerous than in the mountainous division. The average monthly rainfall varies from 0·58 in. to 0·96 in., whereas in the island section it varies from 1·55 in. to 2·87 in. The atmosphere is dry, and in these districts the heat in summer is extreme. Out-door life is possible nearly the whole year round. Hunting large game (deer, bears, mountain sheep, &c.), grouse and duck shooting, trout and salmon fishing, afford pastime for the sportsman in any part of the province. In the dry division fully 90 per cent. of the 365 days in the year may be spent in the open air. In the minds of many persons Canada is always associated with the notion of a climate of ice and snow. That this widely prevalent idea is totally at variance with the facts is often heard with surprise and incredulity. The noble "redskin," *à la* Fennimore Cooper, is longingly looked for by the new arrival in Eastern Canada, and no little amazement is at times manifested when in place of the wigwams of the Indians and the log huts of the settlers are found beautiful, well-built cities. Of all Canada, British Columbia possesses, Dr. Wade considers, the most temperate and salubrious climate.

B.Sc. M.D. (Univ. N.Y.) has not enclosed his card.

THE CANARY ISLANDS FOR INVALIDS.

To the Editors of THE LANCET.

SIRS,—As I have no doubt that many brother practitioners will soon be called upon to recommend a winter resort for phthisical patients, I beg of you to let me say a word of warning anent the Canary group. As a resident practitioner there since 1887 I have had every opportunity of noting the different outbreaks of disease there, and especially in Las Palmas, the capital of Grand Canary. During the season 1887–88 there was much typhoid fever, five English visitors to my certain knowledge succumbing to it. All through 1888 measles was rife, especially amongst the native children, although many English were attacked. Again, in 1889, the Island of Palmas was visited by a sharp epidemic of yellow fever and all through 1890 small-pox and diphtheria prevailed in Grand Canary, chiefly in the outlying towns and villages, and during 1891 small-pox invaded the three towns of Las Palmas, Arucs, and Zelde, causing a great many deaths, and when I left in June was still severe. It goes without saying that the universal "influenza" did not fail to visit this particularly unfortunate island of the "Fortunate" group all through 1890, causing many deaths. As a resort for consumptives, I have found the great amount of wind particularly irritating, on account of the immense clouds of dust and sand always blowing about, and particularly when the wind is south is the climate most relaxing and depressing, and one notices the cases of hæmorrhage are always most frequent with this wind. The climate seems particularly suited for cases requiring rest, chronic rheumatism, kidney and liver affections, as also for sufferers from malarial fevers.

I am, Sirs, yours truly,

E. J FERNANDEZ, L.R.C.P., L.R.C.S.

Sulgrave, near Banbury, July, 1891.

CALF LYMPH.

To the Editors of THE LANCET.

SIRS,—I trust one outcome of the Commission on Vaccination will be the recommendation that arrangements should be made for the unstinted supply of calf lymph. The Government Department at present only professes to provide calf lymph for the purpose of initiating a fresh stock of humanised vaccine; hence after one or two successful applications for calf lymph a further supply is not granted. I am fully convinced that a greater part of the opposition to vaccination would fall away if the public were assured that only calf lymph of undeniably healthy origin would be used in the future. I have frequently observed that the vesicles from which lymph has been taken become the most inflamed, and are the last to heal. From a large experience, extending over twenty years, I may say that since I have used calf lymph exclusively, the last eight years, and *not interfered with the vesicles*, I have been able to vaccinate in four places with the minimum of subsequent inflammation; healing has been rapid, and "good" marks have followed. Whenever I have vaccinated another member of a family from the baby, I have found the vesicle from which the lymph was taken inflame more than its neighbours. By conceding the legitimate demand for lymph taken from healthy calves the enemies of vaccination will be most effectually disarmed.

I am, Sirs, yours truly,

CHAS. W. CHAPMAN, M.D., M.R.C.P.Lond.

Fitzjohn's-avenue, July 24th, 1891.

THE MALARIAL PIGMENT.

F. R. C.—The latest researches on the "pigment of malaria" are those of Dr. Tito Carbone, communicated to the Turin Academy of Medicine. Dr. Carbone, as the result of special experiments, believes he can identify the "pigmentum malaricum" with hæmatin. As is known, hæmatin is a product of the gastric and pancreatic digestion of hæmoglobin. In malaria, according to Dr. Carbone, it is the product of the intra-cellular digestion of the plasmodium.

Miss Robinson (South London Invalid Home).—The correspondence sent us is too long for our columns, and, moreover, the exact facts and details are not given. Further, our correspondent will see that the points she raises are entirely matters of legal nature, to be settled by law, and by the terms of the contract between the authorities of the Nursing Home and the authorities in the house to which the nurse is sent. Any marked want of consideration for nurses attending dangerous and infectious cases, or any breach of the rules under which they act, would require but to be proved. It is, however, a fine point in law and reason whether nurses contracting an infectious disease in the discharge of their duties are to be treated throughout their illness in the house of the patient, and not conveyed at once, under suitable conditions, to their own home, or to some fit receptacle for such cases. It would be a serious objection to taking nurses for infectious cases if it were given out that every infected nurse was to become the care of those who require her nursing services.

PROTEID DIGESTION AND DIABETES.

To the Editors of THE LANCET.

SIRS,—A consideration of the different stages by which fat is formed in the digestion of proteids may throw some light on the origin of diabetes mellitus and other diseases. In the first stages of digestion proteids are divided into urea and glycogen.

The glycogen (1) feeds the hepatic cells, and is one source of fat.
" " (2) sugar = lactic acid = butyric acid = fat.

Should the changes stop at any of these stages, we have diabetes arising at the sugar stage, rheumatic fever at the lactic acid stage, dyspepsia at the butyric acid stage, and emaciation at the fat stage. Such stoppages may be due to the absence of some of the digestive ferments, which may be given with good results after each meal. Trypsin and zymine (ext. pancreatis) are reliable. When there is much emaciation a glass of musty ale and pancreatic emulsion three times a day will have a beneficial effect.

I am, Sirs, yours faithfully,

s.s. *City of Paris*, Inman Line, Liverpool. T. T. REYNOLDS, M.D.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Althaus, London; Mr. Addison, Glasgow; Mr. Archer, Wakefield; Mr. M. R. Bowlan, Newcastle-on-Tyne; Mr. Biggs, London; Messrs. Barker and Son, London; Mr. E. Creswell Baber, Brighton; Dr. H. Charlton Bastian, London; Mr. Bryan, Ealing; Mr. Jas. B. Bailey; Mr. Best, Bournemouth; Mr. Browne, Brynmawr; Mr. Bennett, Liverpool; Mr. Burke, Wolverhampton; Countess Cadogan; Messrs. Carnrick and Co., London; Mr. Cash, Burton-on-Trent; Dr. O. Currie, San Francisco; Mr. Cornish, London; Dr Croke, Beverley; Mr. Duncan, Aberdeen; Mr. Donman, Beaconsfield; Mr. Eschwege, London; Dr. Favrat, Funchall; Mr. Faulkner, London; Dr. A. Foxwell, Birmingham; Dr. Fitzgerald, Middleton, co. Cork; Dr. G. M. Gould, Philadelphia; Dr. W. S. A. Griffith, London; Mr. T. Gaun, Brynmawr; Mr. George, Preston; Mr. H. W. Gordon Green, Westminster Hospital; Mrs. Geden, Kirkstall; Mr. Horton, Exeter; Dr. James Hardie, Manchester; Dr. A Haviland, Oxford; Mr. Hornibrook, London; Mr. V. Jones, London; Mr. Keiffenheim, Stockwell; Sir. T. Longmore, Netley; Mr. E. A. Lyons, Southsea; Dr. H. Grabham Lys, Bournemouth; Mr. Leech, Great Yarmouth; Messrs. E. and S. Livingstone, Edinburgh; Mr. Lamond, Glasgow; Mr. Leatham, Coalisland; Dr. Laprade, Lyons; Dr. Murrell, London; Mr. J. Grant Mills; Mr. Murphy, Newport; Mr. J. McLean, Otago; Dr. E. Hooper May, Tottenham; Dr. McFarland, Norwich; Messrs. Mitchell and Co, London; Dr. McCraith, Oldham; Messrs. Merryweather and Sons, London; Mr. W. Gifford Nash, Plymouth; Messrs. Oliver and Boyd, Edinburgh; Mr. J. W. Orr, Wellingborough; Dr. L. H. Ormsby, Dublin; Mr. Pest, London; Mr. Pike, Gloucester; Dr. Leslie Phillips, Birmingham; Mr. W. N. Praagh, London; Messrs. Roe and Co., Salisbury; Dr. Ridge, Enfield; Dr. Wm. Robertson, Newcastle-on-Tyne; Mr. H. A. Reeves, London; Dr. Shiels, Dunbar; Mr. De Santi, Newcastle; Miss E. Snelling, London; Messrs. G. Street and Co., London; Mr. Stedman, Kensington; Mr. Stables, Ashby-de-la-Zouche; Surg.-General Wm. Stewart, M.D., Lymington; Dr. Clement Sers, London; Messrs. Street Bros., London; Mr. Stenhouse, Glasgow; Mr. Shea, Chesterfield; Mr. Thompson, Doncaster; Mr. Lawson Tait, Birmingham; Mr. S. Thorp, London; Dr. St. Clair Thornton, Engadine; Dr. Thomas, Cardiff; Mr. Tanner, South Lambeth; Messrs. J. T. Vervloet and Co., Rotterdam; Dr. Windle, Birming-

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LETTERS, *each with enclosure*, are also acknowledged from—Mrs. Tyte, Minchinhampton; Dr. Fairland, Smallburgh; Dr. Griffith, Milford Haven; Mr. Shepard, Usk; Dr. Bertram Bristol; Messrs. Blondeau and Co., Kentish-town; Dr. Allkin, Manchester; Dr. Jones, South Wales; Mr. Casella, London; Mr. Tully, Hastings; Messrs. Bilney and Rowlands, Portsmouth; Mr. Sers, Peckham; Messrs. Cassell and Co., London; Dr. Burton, Marple; Mr. Hinde, Banbury; Messrs. Read and Co., Bristol; Mr. Watson, Cheltenham; Mr. Hardwick, Manningtree; Mrs. Turner, London; Dr. Gwynne, Sheffield; Dr. Johnstone, Langport; Mr. Edwards, Tunstall; Mr. West, Gravesend; Mr. Heath, Tufnell-park; Dr. Jennings, Pontypool; Mr. Alexander, Faversham; Mr. Twigg, Rotherham; Mr. Pardon, Flintshire; Mr. Taaffe, Londonderry; Mr. Tomson, Luton; Dr. Nicholes, Somersham; Mr. Owen, Fishguard; Dr. Hamilton, Ashton-on-Lyne; Dr. Knight, Stockton-on-Tees; Mr. East, Pontrilas; Mr. Redwood, Rhymney; Mr. Thin, Edinburgh; Mr. Schall, Wigmore-street; Mr. Hebblethwaite, Mirfield; Mr. McDougall, Runcorn; Dr. Coates, Salisbury; Dr. Palmer, Sherborne; Mr. Heywood, Manchester; Mr. Cross, Bridlington Quay; Dr. Barnes, Axminster; Mr. Hale, Chesterfield; Mr. Jackson, Bradford; Mr. Cochrane, Wigtonshire; Dr. Williams, Tottenham; Dr. Sergeant, Camberwell; Mr. Morris, Beckenham; Norfolk County Asylum; Erics, London; J. M., London; Cicero, London; Queen's College, Birmingham; Leslie, Leeds; Companion, Cheshire; Halifax Infirmary; M.R.C.S., Reading; J. F. C., London; Hospital for Sick Children, Newcastle-on-Tyne; Thermograph, London; F. G., West Yorks; Spes, London; Beta, London; Hyoscine; Surgeon, South Devon; A. B., London; Medicus, Yorks; X., Lancaster; Bachelor, Staines; Femur, London; Woden, London; M., Clapham; Medico, London; E. A., Fulham; Alpha, City-road; Surgeon, Somerset; W., Manchester; Medicus, Mottram; Kensington, London; Provincial, London; Angler, London; M.R.C.S., Dorset; L. C., London; Senex, London; Surgeon, London; Canton, London; Able, London; Essex, Forest-gate; Westward Ho, London; Carolus, London; Medicus, Crewe; Sigma, Manchester; Hugh, London; T, Homerton; West-end, London; A. G. C., London; Leeds, London; Veritas, London.

NEWSPAPERS.—*Birmingham Daily Post, Liverpool Mercury, Bradford Observer, Warrington Guardian, West Sussex Gazette, Glasgow Herald, Newcastle Daily Chronicle, West Kent Times, Sydney Morning Herald, Sheffield Independent, Levant Herald (Constantinople), Dundee Advertiser, Scotsman, Essex County Chronicle, Manchester Guardian, Nottingham Daily Express, Western Mail, Melbourne Argus, North British Daily Mail, Bristol Mercury, Liverpool Daily Post, Scottish Leader, Yorkshire Post, Law Journal, Yorkshire Herald, Surrey Advertiser, Leeds Mercury, West Middlesex Standard, Weekly Free Press and Aberdeen Herald, Windsor and Eton Gazette, Reading Mercury, Insurance Gazette, Birmingham Daily Gazette, Architect, Local Government Chronicle, Mining Journal, Hertfordshire Mercury, City Press, Broad Arrow, Sunday Times, Windsor and Eton Express, Chemist and Druggist, Metropolitan, West Middlesex Advertiser, Spectator, Saturday Review, Pharmaceutical Journal, Builder, Sunderland Daily Echo, Nursing Record, Manchester City News, Cape of Good Hope Government Gazette, North Wales Guardian, Courrier de Londres, Denbighshire Free Press, Hampshire Independent, Carlisle Journal, Wrexham Advertiser, Madras Times, Derbyshire Advertiser, Cumberland Pacquet, &c.*, have been received.

Medical Diary for the ensuing Week.

Monday, July 27.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Tuesday Wednesday, Friday, and Saturday at the same hour.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.

Tuesday, July 28.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.
GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic operations, 4 P.M.; Friday, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electrotherapeutics, same day, 2 P.M.

Wednesday, July 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.

Thursday, July 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.

Friday, July 31.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, August 1.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

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